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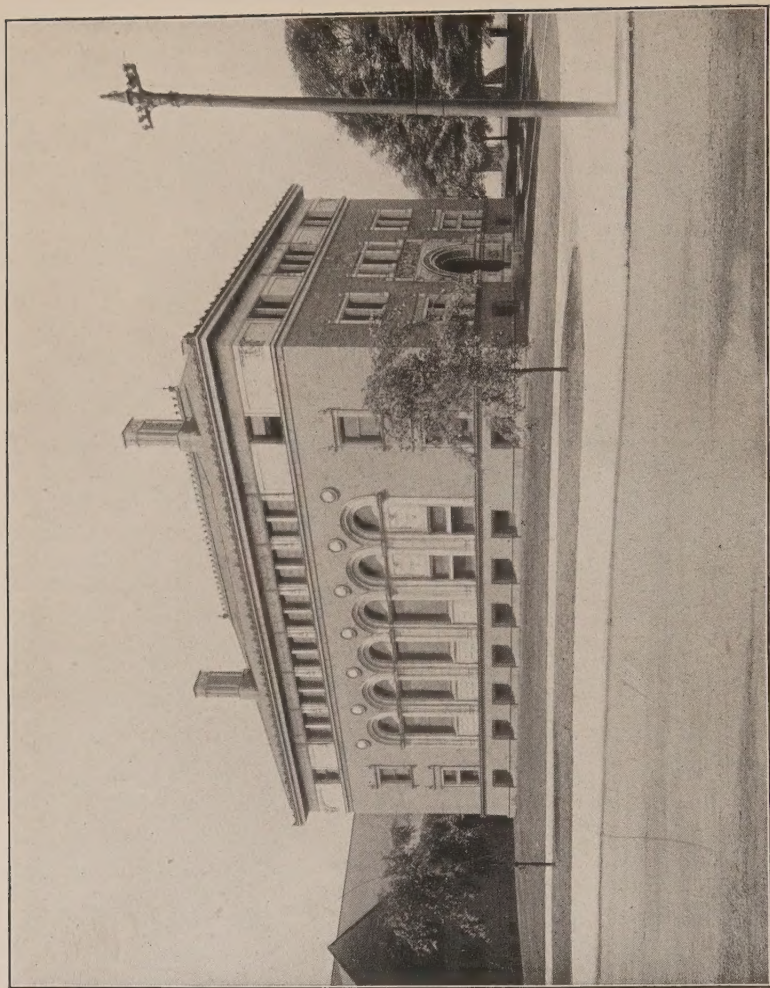
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THE WESTERN RESERVE
HISTORICAL SOCIETY

TRACT NO. 91



THE SOCIETY'S BUILDING

TRACT NO. 91
THE WESTERN RESERVE HISTORICAL SOCIETY

ISSUED SEPTEMBER, 1907

MANUAL
OF THE
WESTERN RESERVE
HISTORICAL SOCIETY

GIVING A SUMMARY OF ITS
HISTORY, ORGANIZATION, CONDITION
AIMS AND PURPOSES
AND
ITS SERVICES TO THE
COMMUNITY

CLEVELAND, OHIO
1907

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1907



THE WESTERN RESERVE HISTORICAL SOCIETY

OFFICERS FOR 1909-10

PRESIDENT

Wallace Hugh Cathcart

VICE PRESIDENTS

John D. Rockefeller

Jacob Perkins

David C. Baldwin

Orlando J. Hodge

CORRESPONDING SECRETARY

George H. Kelly

TREASURER

Edwin V. Hale

RECORDING SECRETARY

Warren S. Hayden

CURATOR

Albion M. Dyer

ASSISTANT LIBRARIAN

Annette P. Ward

FINANCE COMMITTEE

David Z. Norton

S. Prentiss Baldwin

C. W. Bingham

Warren S. Hayden

Ambrose Swasey

William G. Dietz

TRUSTEES

Term expiring May, 1910

F. F. Prentiss

Elroy M. Avery

Ambrose Swasey

William P. Palmer

Term expiring May, 1911

Charles W. Bingham

Henry C. Ranney

James Barnett

Edmund S. Burke, Jr.

Term expiring May, 1912

S. Prentiss Baldwin

Webb C. Hayes

Liberty E. Holden

James R. Garfield

Term expiring May, 1913

A. T. Brewer

Jeptha Homer Wade

William G. Dietz

C. A. Grasselli

W. G. Mather

Term expiring May, 1914

Ralph King

Douglas Perkins

David Z. Norton

Price McKinney

THE WESTERN RESERVE HISTORICAL SOCIETY

The beginnings of this Society may be traced back to the year 1811, at which time Cleveland was a village of fifty-seven people, eighteen families.

In this pioneer community were sixteen men ready to form a library association and thus the beginning was made. They were, William Gaylord, Abijah Hewit, James Kingsbury, Alfred Kelley, John Lanterman, David Long, Daniel Mosher, Elias Murray, Harvey Murray, Nathan Perry, James Root, George Wallace, John Walworth, Samuel Williamson, Mathew Williams, Stephen King.

Antecedents

The years following were hard ones, and there were breaks in the continuity, but in various forms a library society or lyceum continued and in 1848 when the Cleveland Library Association was chartered a considerable collection of books had accumulated. This Charter was amended in 1867 to provide for the organization of the Western Reserve Historical Society, and it was formed as the Historical Department of the Cleveland Library Association (now Case Library).

The amended article of the Charter of the Cleveland Library Association which provided the original basis for the Western Reserve Historical Society read as follows:

Charter

"SECTION 1. Historical and scientific departments of this association may be organized upon the written application of ten members, who, with their associate members in such department, shall, for the management of the same, elect a board of nine curators.

"SECTION 2. After the first election three members of said board shall be elected annually, all of whom shall hold office until others are elected to succeed them. Said board shall elect a president of said department and three vice presidents and such other officers as may be required by the by-laws of this

association, and shall make report of their proceedings to the board of directors ten days previous to the annual election of this association."

This close connection with the Cleveland Library Association continued until 1892, when an independent charter was obtained and the society reorganized under it, as follows:

STATE OF OHIO

These Articles of Incorporation of

THE WESTERN RESERVE HISTORICAL SOCIETY

Witnesseth, That we, the undersigned, all of whom are citizens of the State of Ohio, desiring to form a corporation not for profit, under the general corporation laws of said State, do hereby certify:

FIRST. The name of said corporation shall be The Western Reserve Historical Society.

SECOND. Said corporation shall be located and its principal business transacted at the City of Cleveland, in Cuyahoga County, Ohio.

THIRD. The purpose for which said corporation is formed is not profit, but is to discover, collect and preserve whatever relates to the history, biography, genealogy and antiquities of Ohio and the West; and of the people dwelling therein, including the physical history and condition of that State; to maintain a museum and library, and to extend knowledge upon the subjects mentioned by literary meetings, by publication and by other proper means.

In Witness Whereof, We have hereunto set our hands, this seventh day of March, A. D. 1892.

Henry C. Ranney,	Charles C. Baldwin,
D. W. Manchester,	David C. Baldwin,
Amos Townsend,	Percy W. Rice,
William Bingham,	Jas. D. Cleveland,
A. T. Brewer.	

The Western Reserve Historical Society originated in 1867 as The Reserve Historical Department of the Cleveland Library Association (now Case Library). It flourished in that relationship, and the enlightened generosity and prudent care of the joint trustees established it in full confidence and high

Origin of the
Society

esteem of the people of the Western Reserve. It became the safe repository for relics, records, specimens, documents, pioneer mementoes, heirlooms, letters, deeds and papers, maps and surveys, coins, pictures, books, etc., pertaining to the settlement and growth of Ohio. Men of zeal, genius and ability stood round the society and gave to it their strength and substance so that it now ranks as one of the richest in its possessions of the local societies of America.

The Society was planned by C. C. Baldwin and he imparted to it some of the characteristics of his own sterling nature. It was so organized that its work and its accumulations should never by any chance be dissipated through the failure of support. The Western Reserve Historical Society has continued to the present time with the characteristic civic pride and conservatism that marked the career of its distinguished founder. It is housed in a beautiful building where all is safe and in a situation where it should command the respect and support of the entire city, and indeed of the State as well.

The following names are associated with the first year of the Society's existence as organizers or as members:

**Founders
of the
Society**

M. B. Scott	C. C. Baldwin
W. N. Hudson	Harvey Rice
E. R. Perkins	L. E. Holden
George R. Tuttle	F. M. Backus
Samuel Starkweather	Joseph Ireland
Joseph Perkins	J. S. Kingsland
Charles Whittlesey	Peter Thatcher
Samuel Williamson	George Willey
George Mygatt	W. P. Fogg
C. T. Sherman	Henry A. Smith
S. V. Willson	J. H. A. Bone
Jacob H. Smies	H. B. Tuttle
A. T. Goodman	T. R. Chase
J. D. Cleveland	John D. Crehoe
John H. Sargeant	H. M. Chapin
J. C. Buell	D. H. Beardsley
C. W. Sackrider	G. C. F. Hayne
A. K. Spencer	P. H. Babcock

John F. Warner made the first great gift, a legacy of \$500, which came to the Society in its infancy.

Good Friends William J. Gordon was an early and generous friend. Joseph Perkins made liberal contributions. By far

the most liberal friend was Leonard Case, not only with funds, but with gifts of his finest Americana. Charles Whittlesey served the Society faithfully and well during his active life, and at his death bestowed upon it his great collection of books and pamphlets. Judge Baldwin's gifts were numerous and noble, the finds of a life-long search for material, and these have been supplemented since by many contributions in his name. A. T. Goodman devoted many years to the work of the Society and at his death gave to it his magnificent collection of autographs. R. M. Stimson of Marietta, while State Librarian filled up our collections of state publications, giving a number of rare and interesting pamphlets of the early years of Ohio. The various changes in the Society developed timely help from many sources, notably the purchase of the old home of the Society on the Public Square, and the erection of the beautiful building now occupied by the Society on University Circle. Amos Townsend, John D. Rockefeller, J. H. Wade, H. C. Ranney and L. E. Holden should be noted especially. A list of these friends is practically a list of the first families of this city.

The Society owns and occupies the building on Euclid Avenue at University Circle, opposite Wade Park and the College Campus, one of

The Building the picture-points of the city. This location is rapidly coming into prominence and its value as real estate has greatly increased since our site was purchased. The building is fire-proof, modern in equipment and construction and well suited to the uses of the Society. The rear of our lot, 80 feet frontage on Fairmount Ave., is unoccupied, and this gives ample room for expansion when necessary. Since the grounds are within the park area the walks and lawns are cared for by the Park Department. The exterior aspect of the building is attractive and comports well with the character of the Society and



MUSEUM, Main Floor

the environment. Inside everything is pleasant and convenient, the museum is imposing, the library quiet and comfortable, and the auditorium satisfactory for the uses of the Society. There are a number of small rooms suitable for special collections, and in the basement a roomy vault for storing books and material that needs special care. Recent changes in the growth of this section of the city, the expansion of the colleges, the opening of the Art School and the erection of the Art Gallery seem to be all working together for the betterment of our location.

The Western Reserve Historical Society has received from the pioneers of Ohio and from their descendants a large quantity of curios, relics, specimens of the mound-build- **The Museum**
ers and Indians, mementoes of the
border wars and of the pioneer settlements, coins, pictures, photographs, arms, etc., in great variety and of the liveliest interest. These articles cover a wide range of the sciences; ethnology, anthropology, geology, geography, zoölogy, etc., etc. To a certain extent these accumulations are classified and arranged for display but the greatest number are not yet ready to be shown. Such a museum, with the materials on hand, arranged by scientific methods and logical classification would attract attention as one of the most important institutions of the United States. The benefit to the community of a museum of this character is so great that it cannot be overestimated.

It may be well, at this point, to enumerate some of the important attractions of the Museum: Relics of the homes of the early settlers of the Reserve; instruments and docu- **Some Features**
ments of Moses Cleaveland and the **of the Museum**
early surveyors; relics of the aborigines picked up on the Western Reserve by the first comers; war relics of the expeditions of Rogers, Bradstreet and Bouquet; the campaigns against the Miami Indians; the War of 1812, especially the march to Fort Meigs and Perry's victory; of the Civil and Spanish-American War and of the colonial services of Ohio soldiery. Collections of anthropology, ethnology, etc.,

gathered by citizens of the Western Reserve. Coins, medals, paper money, political badges, mementoes. Flags and implements of war representing Ohio military life. Articles deposited by the civic and patriotic organizations, colleges, etc., of Cleveland and Northern Ohio. Articles illustrating the topography, geology, palaeontology, mineralogy, etc., of the Cuyahoga Valley and Lake region.

By means of legacies, donations, and by purchases, supplemental thereto, extending over a period of forty years, the Society has accumulated a spec-

Library ialized library of great importance. If the size alone is considered, as we may see from the report of the American Historical Association, it compares favorably with the older and well endowed historical societies of the East. But numbers give very little idea of the true strength of our library. Our collection of source books of history relating to the Northwest Territory and especially to Ohio is practically complete. In genealogy it is well supplied with the books and papers needed for active searchers. In statistical publications of the State and Municipality we have everything in the order of publication. The entire library is now being put in order so that each department will be serviceable to members and to special workers.

Very important among the books is the series of volumes of early travel owned by the Society. These are the published notes of adventurers

Travels in the ers who made the perilous trip from
Ohio Valley Pittsburg to Cincinnati or Louisville
by land or water. The accounts of the wonderful things they saw of man and nature, and the experiences they met with, were eagerly sought in the East and in England and France. Men were longing for habitation in this marvelous Valley of the River Ohio, a river of such striking beauty that it was so named, "The Beautiful River," in all the languages of the rival races of men that claimed the region as their own. These books followed each other rapidly during the years before 1825 and some go back as far as 1750. Their value as sources of history is very

high. They are now very scarce and it would not be possible to find all of them, or indeed, a few of them, in many libraries. The Society has practically a complete set of the original editions of these English and French works.

The work of the Historical Society from the beginning took the form of searching out, and collecting material, and of preserving, arranging, displaying, and publishing the fruits of its research. In all these activities it has been signally successful. Its men went forth on the strength of its resources and in the power of its prestige and gathered up great treasure of relics, records, manuscripts, books and papers at a time when these things were obtainable at first hand, and which otherwise might have been lost. The Society has held these treasures in trust for the future. It has the material for a historical museum of great importance illustrating the aboriginal and pioneer life of Ohio and the Ohio Valley. It possesses the complete record in MSS. of the survey and settlement of the Western Reserve. It owns a collection of maps and books, pamphlets, newspapers, documents and official reports covering the political, financial, commercial growth, of Ohio especially, and more generally of the great Middle West. To these collections the student and historian must surely come to learn of these wonderful movements.

The Society made an early start in publishing the material that came to hand. The publications took the form of "Tracts" prepared in the natural course of the activity of its members in their early search of Ohio history. The pioneers, Indian remains, border troubles, wars, and local geography were the subjects of greatest interest and the output of the Western Reserve Historical Society in these lines is of importance. At first the tracts were modest leaflets printed from forms taken from the columns of the Cleveland newspapers, whose publishers were eager to print the proceedings of the Society in full. They were issued through the coöperation of the newspapers at little expense to the

Activities

Publications

Society. The tracts found immediate favor, and some of them had to be reprinted. They increased in number and size and some contained costly plates and maps. After a time the Society began to realize the importance of these tracts and they were then issued in volumes. Three such volumes bound in uniform style have been published, and there are a number of tracts ready to make a fourth. These bound volumes were furnished free to members, and sent to all societies in exchange for valuable publications, which were added to the library. Now the editions of the earlier tracts are exhausted, and still they are in constant demand. The time seems to be at hand when the Society should prepare to replenish certain tracts in new editions with carefully prepared notes and indexes.

Through the instrumentality of this Society the papers of General Arthur St. Clair were discovered, purchased and published by the State of Ohio, in two large volumes. The **Special Publications** Margry papers, a series of volumes containing the documents of La Salle, were published by the United States Government through the efforts of this Society. The journals of Trent, Heath and Brule pertaining to the Ohio region were issued indirectly through this Society, and from materials in our archives.

The richest treasures of the Society are its manuscripts. Most important of these are the records of the Connecticut Land Company and its **Manuscripts** instructions to agents and surveyors. Next are the field-books and daily records and sketches made by the surveyors at work on the Reserve. Then the finished manuscript plats and finally the official survey map. Almost of equal importance are the papers and records left by the original holders of lands who settled at the various centers. These have been turned over to the Society for preservation. They are replete with material information of the early days and early settlements of the Reserve. There are also many letters and documents relating to the Indian troubles on the border and the War of 1812. Some of these have been published by

the Society; others have been mounted and listed and the lists published, but there are large deposits of papers, etc., which are still to be examined and published when time and means will allow.

Certain manuscripts not yet classified and arranged deserve a moment's thought. These are the papers of Col. Whittlesey representing the great range of action in which his life was spent and his intimate connection with the economic development of Ohio and the Lakes' ore region. Among these papers are hundreds of pamphlets on which Col. Whittlesey has made marginal notations. Second in importance are the papers of George Tod; the Wolcott papers; the papers of Ephraim Root; a large number of record books and letters of the early citizens of Cleveland, many of which have never been examined; scrap books containing many historical notes on subjects in which Col. Whittlesey was interested have all been given to the Society. There are besides, a large number of copies of official papers of other libraries, made for the Society, such as the military correspondence of Gen. Harmar, the orderly books and journals of Captain Trent and Captain Heart, and the record of the captivity of John Fitch among the Delaware Indians.

The collections of historical maps and atlases are notably fine. These cover the entire range of history from the sixteenth century to the present day. They consist of:

1. The classic maps in original examples of the work of the great cartographers of Amsterdam, London, and Paris. They are classified to show the development of knowledge of the Great Lakes and the Ohio River, as based upon the returns of voyagers to the Royal Geographical Societies of France and England.
2. Maps designed by the explorers themselves and published in their works; with few exceptions these are originals, but we have also almost a complete line of reprints.
3. Maps issued to illustrate standard books of travel and history. These cover the period of opening

up of the great wilderness of the Pennsylvania, Ohio and Kentucky frontier.

4. Political maps representing the rival claims of New France or British America to the Ohio Valley.
5. War maps of the Revolution and the border wars.
6. Maps for the tourist and emigrant of the pioneer period.
7. Colonial maps based on first surveys and political development of Ohio.
8. Wall maps and atlases of the various counties and cities of the Western Reserve.

No more extensive and complete collection can be found in any American library. They are all well arranged and listed so that they may be displayed under glass on occasion for the benefit of students in the colleges and high schools. It is hoped that in the near future the Society may be able to publish a list of its maps.

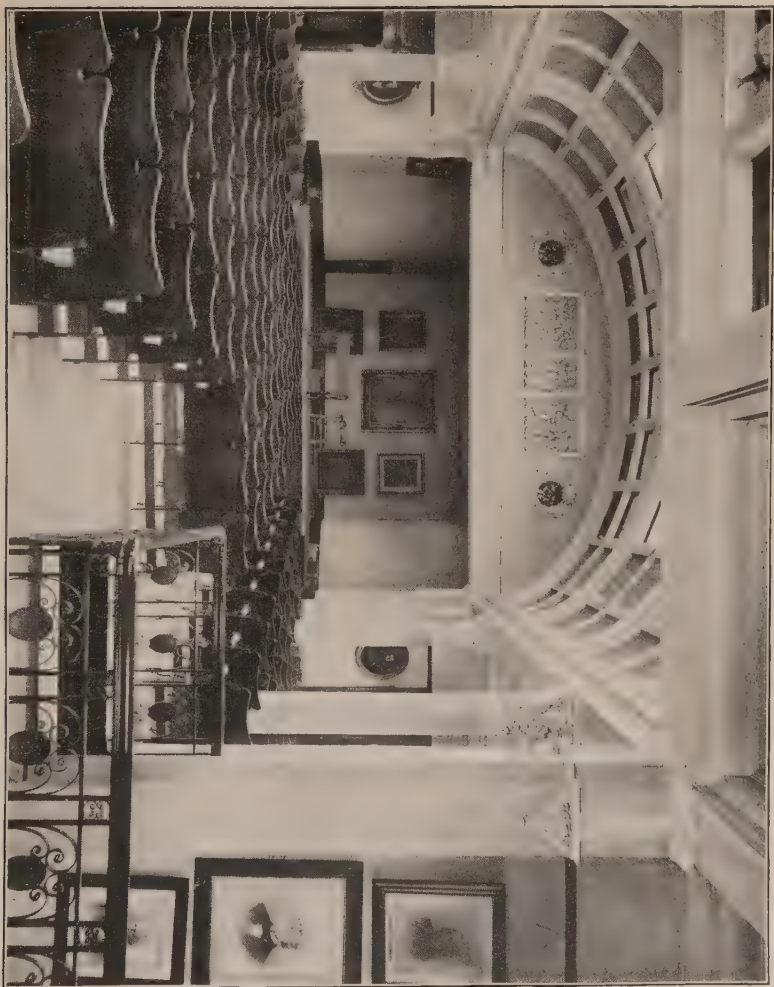
The Society has a large collection of books and periodicals useful to workers in genealogy. These are so arranged as to be of service to

Genealogy all who seek, even without experience in such work, for information of their ancestors. There are:

1. The general reference books and dictionaries of genealogy.
2. Files of the *New England Register* with index, and other periodicals.
3. Family histories, over 800 names, in alphabetical order on open shelves.
4. Town records, and local histories covering New England, New York, Pennsylvania, Virginia, New Jersey, Maryland, North and South Carolina, etc.
5. Rosters of the several wars, Pension Rolls, Year Books of the Patriotic Societies.

No library, except in New York, Massachusetts, Philadelphia, and Chicago has a larger equipment of books in this line.

Our collection of newspapers is most important. It embraces not only the local field, but many states



AUDITORIUM, Third Floor

and cities are represented. Unbroken files of Cleveland newspapers is the **Newspapers** strong feature. These are kept strictly up to date, in bound volumes, through the generous coöperation of the publishers. Most of these are in duplicate and thus our files are secure for future uses. Early Journals of Northern Ohio, especially the Western Reserve, are valuable items. These cover the pioneer years of our history and reflect the political and social conditions of the great westward movement following the War of 1812. Our newspapers are housed in the basement where they are all arranged on shelves for easy consultation. Here also are the government publications and statistics, and large quantities of unclassified material which must be arranged.

The Society has a complete set of views representing this city or parts of it at different times during its growth. Most of these are framed engravings and there are numerous **Other Features** photographs. Our collection of portraits, busts, etc., of early Cleveland men, and a number of historical paintings makes up quite an interesting local gallery.

A Library of Cleveland Authors and early imprints of the Ohio publishers has already been started. Special collections of importance are the White library of Arctic Travel; the Page collection of the publications of our local literary society, the Rowfant Club; collections of books and papers on Prehistoric man, Archaeology, Anthropology, Geology, Geography, etc.

Kelley's Island of the Put-in-Bay Group is an exhibit of glacial action. The great groove-stones on this island are owned by this Society. On the Public Square are two cannons, one a relic of Perry's victory, and one of the Civil War, these also belong to the Western Reserve Historical Society. Other War relics are in the museum, among these the interesting and important deposit of Col. Webb C. Hayes representing the relief expedition to Peking.

The Society consists of three classes of members.

- (1) Annual or Sustaining members have full priv-

ileges, use of library, all publications, annual fee five dollars. (2) Controlling members, who alone have the voting franchise, are life members, fee \$100 (one payment), and Patrons, fee \$500. (3) Honorary and corresponding members are chosen by vote of the Trustees.

Annual meetings are held on the first Tuesday of May in the Trustees' room at the Society building, when the election of officers takes place. Full reports of the work of the year are read at these meetings and all business is reviewed and plans for the future considered.

No incumbrance can be placed upon the property of the Society, nor can its real estate be conveyed except on the written consent of two-thirds of the life members and Patrons.

It has always been the practice of the Society to hold stated meetings for literary and historical study. The library is for the exclusive use of members but students and the public are cordially welcome to consult the books in the library for the purpose of genealogical or historical research.

No books are taken from the building by members or by the public. The manuscripts, documents and source books of history are under special restrictions to insure their preservation.

Roster Officers of the Society have served as follows:

Presidents—

Charles Whittlesey.....	1867 to 1886
Charles Candee Baldwin.....	1886 to 1895
Henry Clay Ranney.....	1895 to 1901
Liberty Emery Holden.....	1901 to 1907
Wallace Hugh Cathcart.....	1907 to —

Vice Presidents—

M. B. Scott.....	1867 to 1872
J. H. Salisbury.....	1870 to 1880
Elisha Sterling.....	1873 to 1883
William Perry Fogg.....	1878 to 1896
D. W. Cross.....	1880 to 1891
John Harris Sargent.....	1883 to 1893
D. P. Eells.....	1884
Sam Briggs.....	1886 to 1892

W. J. Gordon.....	1891 to 1892
R. B. Hayes.....	1892
William Bingham.....	1894 to 1904
John D. Rockefeller.....	1892 to —
Henry B. Perkins.....	1896 to 1902
C. A. Grasselli.....	1902 to 1907
D. C. Baldwin.....	1904 to —
H. A. Garfield.....	1904 to 1905
Jacob B. Perkins.....	1905 to —
O. J. Hodge.....	1907 to —

Recording Secretaries—

J. C. Buell.....	1867 to 1868
Alfred T. Goodman.....	1868 to 1871
T. R. Chase.....	1871 to 1872
C. C. Baldwin.....	1873 to 1884
D. W. Manchester.....	1884 to 1892
J. B. French.....	1892 to 1893
S. H. Curtiss.....	1893 to 1894
Wallace H. Cathcart.....	1894 to 1907
W. S. Hayden.....	1907 to —

Treasurers—

A. K. Spencer.....	1868 to 1869
George A. Stanley.....	1869 to 1870
Samuel Williamson.....	1870 to 1880
C. C. Baldwin.....	1880 to 1883
Douglas Perkins.....	1883 to 1886
John B. French.....	1886 to 1893
C. C. Baldwin.....	1893 to 1894
Moses G. Watterson.....	1894 to 1895
Horace B. Corner.....	1895 to 1907
E. V. Hale.....	1907 to —

Corresponding Secretaries—

C. C. Baldwin.....	1868; 1883-86; 1891
D. W. Manchester.....	1887
A. L. Withington.....	1894

PATRONS, LIFE, CORRESPONDING AND ANNUAL MEMBERS

OF THE WESTERN RESERVE HISTORICAL SOCIETY

PATRONS

- | | |
|--|---|
| <ul style="list-style-type: none"> *Perry H. Babcock *Charles Candee Baldwin Hon. Dvaïd Candee Baldwin, <i>Elyria</i> *Elbert Irving Baldwin Charles W. Bingham *Hon. William Bingham Mrs. Mary Scranton Bradford Charles F. Brush *Hon. Stevenson Burke *Leonard Case *Mrs. Eliza Ann Clarke *Mrs. Maria B. Cobb *Dan Parmelee Eells *William J. Gordon *Truman P. Handy Mrs. Stephen V. Harkness Henry R. Hatch *Hon. John Hay *Peter M. Hitchcock Liberty E. Holden *John Huntington Oliver G. Kent | <ul style="list-style-type: none"> *Isaac Leisy ✕ Mrs. Flora Stone Mather Samuel Mather William G. Mather *Hon. Henry B. Payne Oliver H. Payne *Hon. Henry B. Perkins, <i>Warren</i> *Joseph Perkins *James Pickands ✕ Alfred A. Pope, <i>Farmington, Connecticut</i> John D. Rockefeller *Charles O. Scott *Mrs. Margaretta Stone *Isaac N. Topliff *Hon. Amos Townsend ✕ James J. Tracy Jephtha Homer Wade *John F. Warner *Miss Mary A. Warner Thomas H. White Hon. William J. White *Mrs. Mary E. Whittlesey *John L. Woods |
|--|---|

LIFE MEMBERS

- | | |
|--|---|
| <ul style="list-style-type: none"> *Jarvis M. Adams *Hon. John W. Allen Miss Sarah L. Andrews *Peter M. Arthur Elroy M. Avery Mrs. Brenton D. Babcock ✕ Mrs. Lucy (Mygatt) Backus *Dudley Baldwin *Hon. John D. Baldwin, <i>Worcester, Mass.</i> *Norman C. Baldwin | <ul style="list-style-type: none"> Samuel Prentiss Baldwin *Seymour Wesley Baldwin Ohio C. Barber, <i>Akron</i> Gen. James Barnett Levi F. Bauder *Hon. Clifton B. Beach *Thomas S. Beckwith *Lucius V. Bierce, <i>Akron</i> *Edward Bingham *Hon. Jesse P. Bishop *Henry C. Blossom *William J. Boardman |
|--|---|

* Deceased.

LIFE MEMBERS (Continued)

- ✕ E. H. Bourne
- ✕ N. P. Bowler
- Hon. W. W. Boynton
- Mrs. S. A. Bradbury
- *Alva Bradley
- A. T. Brewer
- Luther A. Brewer, *Cedar Rapids, Iowa*
- Fayette Brown
- Harvey H. Brown
- *John R. Buchtel, *Akron*
- A. E. Buell
- *Charles H. Bulkley
- ✕ Thomas Burnham, *Glen Falls, N. Y.*
- *Jonathan F. Card
- Wallace Hugh Cathcart
- W. S. Chamberlain
- *Herman M. Chapin
- *Oscar A. Childs
- ✕ William Chisholm, Sr.
- ✕ William Chisholm
- ✕ Prof. Edward W. Claypole, *Akron*
- *Ahira Cobb
- *John L. Cole
- *Hon. William Collins
- *A. G. Colwell
- Joseph Colwell
- *A. L. Conger, *Akron*
- *Warren H. Corning
- *David N. Cross
- *Stiles H. Curtiss
- *Kirkland K. Cutler, *Spokane*
- *William M. Darlington, *Pittsburg*
- *J. H. Devereaux
- Wilson S. Dodge
- *Lyman C. Draper, LL. D., *Madison, Wis.*
- A. M. Dyer
- H. C. Ellison
- *Hon. Heman Ely, *Elyria*
- *John Erwin
- *A. W. Fairbanks
- ✕ William Perry Fogg, *New York City*
- ✕ Gen'l Manning F. Force, *Sandusky*
- Julius E. French
- *Samuel Augustus Fuller
- Harry A. Garfield
- *Hon. James A. Garfield, *Mentor*
- *Theodatus Garlick
- George A. Garretson
- *Charles E. Gehring
- Charles F. Glasser, *Florida*
- *Charles Gordon
- Caesar A. Grasselli
- *Eugene Grasselli
- Miss L. T. Guilford
- Cleveland C. Hale
- Hon. John C. Hale
- Leonard C. Hanna
- *Stephen V. Harkness
- *H. A. Harvey
- *Hon. Rutherford Birchard Hayes, *Fremont*
- *G. E. Herrick
- Charles G. Hickox
- Miss Laura Hickox
- Frank F. Hickox
- Ralph W. Hickox
- *Addison Hills
- Col. O. J. Hodge
- *Franklin B. Hough, *New York*
- Colgate Hoyt, *New York*
- ✕ George Hoyt
- *James M. Hoyt
- *J. L. Hudson
- Mrs. Mary Wood Hunt
- Miss M. E. Ingersoll
- Kent Jarvis, Jr., *Massillon*
- *Henry N. Johnson
- M. M. Jones, *Utica, N. Y.*
- *Mrs. Frederick Judson
- *Myron R. Keith
- *Horace Kelley
- *Thomas M. Kelley
- *Jared Potter Kirtland, LL. D.
- *William G. Lane, *Sandusky*
- *Increase A. Lapham, LL. D., *Wisconsin*
- *Benson G. Lossing, *New York*
- *O. H. Marshall, *Buffalo, New York*
- *Samuel H. Mather, LL. D.
- *Samuel L. Mather
- *Herbert McBride
- John Harris McBride

* Deceased.

LIFE MEMBERS (Continued)

- ✕Leander McBride
 *Lewis Miller, *Akron*
 William H. Miner, *Cedar Rapids, Iowa*
 *Hon. James Monroe, *Oberlin*
 *Edmund P. Morgan
 *George W. Morgan
 *William J. Morgan
 *George Mygatt
 *Hon. Eben Newton
 *Hon. William S. C. Otis
 *George W. Pack
 Charles A. Paine
 Eugene H. Perdue
 Douglas Perkins
 Edwin R. Perkins
 George T. Perkins, *Akron*
 Jacob B. Perkins
 Joseph Perkins
 *L. Lewis Perkins
 William A. Price
 *William H. Price, Jr.
 Mrs. William H. Price, Jr.
 Frederick W. Putnam, *Cambridge, Mass.*
 Henry Clay Ranney
 *Hon. Rufus P. Ranney
 *Harvey Rice
 ✕Percy W. Rice
 Frederick P. Root
 *Henry C. Rouse
 *James F. Ryder
 J. H. Salisbury, M. D.
 Leonard Schlather
 *Ferdinand Schumacher, *Akron, O.*
 John F. Seiberling, *Chicago, Ill.*
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 *Stiles C. Smith
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 *Col. Charles Whittlesey
 *George Willey
 *Hon. Samuel E. Williamson
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 J. O. Austin, *Providence, R. I.*
 Judge George S. Batchelder, *Lisbon, Portugal*
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 *Robert Clarke, *Cincinnati, O.*
 Thomas S. Collier, *New London, Conn.*
 *Judge Joseph Cox, *Cincinnati, O.*
 *Gen. Charles W. Darling, *Utica, N. Y.*

* Deceased.

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 X John Ward Dean, *Boston, Mass.*
 X Julius Dexter, *Cincinnati, O.*
 J. P. Dunn, Jr., *Indianapolis, Ind.*
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 James Tillinghast, *Buffalo, N. Y.*
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Akron, O.
 *William H. Whitmore,
Boston, Mass.
 *Thomas Wilson, *Washington, D. C.*
 Rev. William Copley Winslow,
 D. D., LL. D., D. C. L.,
Boston, Mass.
 *Justin Winsor, *Cambridge, Mass.*

* Deceased.

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H. E. Andrews	Silas Hitchcock
✓ Dr. Elroy M. Avery	✓ L. E. Holden
✓ D. C. Baldwin	C. F. Hoover
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✓ Mrs. M. A. Hanna	W. S. Tyler
✓ A. G. Hart	✓ J. H. Wade
✓ H. R. Hatch	W. R. Warner
P. L. Haworth	Thomas H. White
W. S. Hayden	✓ A. L. Withington
W. C. Hayes	S. H. Worthington

PUBLICATIONS

Following is a list of the official publications of the Western Reserve Historical Society with a brief description of each.

W. R. H. S. TRACT 1. Battle and Massacre at Frenchtown, Michigan, January, 1813, by Rev. Thomas P. Dudley, one of the Survivors. Narrative of incidents on March to River Raisin. Letter to Gen. Leslie Coombs, dated May 26, 1870. 4 p. August, 1870, 2nd ed. (reset), 4 p.

W. R. H. S. TRACT 2. Judges of the Supreme Court of Ohio, under the first constitution, 1803-1852, by Alfred T. Goodman, secretary of the Society. Notes 1787 to 1852. 7 p. September, 1870. 2nd ed. (reset), 8 p.

W. R. H. S. TRACT 3. Papers relating to the War of 1812. Selection 1 from the letters of Elisha Whittlesey, aide to Maj. Gen. Elijah Wadsworth, on the Ohio frontier. 4 p. November, 1870.

W. R. H. S. TRACT 4. First White Children Born on Ohio Soil, by Alfred T. Goodman, Secretary of the Society. Examination of claims as to Johanna Maria Heckewelder and others. 7 p. January, 1871.

W. R. H. S. TRACT 4. 2d ed. First White Child in Ohio, by the late A. T. Goodman. 1871. Revised and corrected carrying the date back to 1754. 7 p.

W. R. H. S. TRACT 5. Ancient Earth Forts of the Cuyahoga Valley, Ohio, by Col. Chas. Whittlesey, President of the Society. Based on Surveys and excavations made by the author, with description of relics. 40 p. 9 lithographic plates showing plats of the locations of mounds.

W. R. H. S. TRACT 6. Papers relating to the First White Settlers in Ohio. Letters and notes on Gen. Harmar's expedition against squatters in the Ohio Valley, 1779, and other settlements at the Salt Springs. Scioto Valley, Miami Valley, etc. 8 p. July, 1871.

W. R. H. S. TRACT 7. [Selection No. 2] War of 1812. [cont. Tract No. 3]. From the papers of Hon. E. Whittlesey, petitions of citizens of Portage Co., returns of draft Ohio Militia. 7 p. (no date). [This Tract is not marked No. 7 and is sometimes bound in with Tract No. 3].

W. R. H. S. TRACT 8. Indian Affairs around Detroit in 1706. Speech of Miskouaki, and reply of Gov. Gen. Vaudreuil, from the Lewis Cass French MSS. translation in the archives of the Society. 6 p. December, 1871.

W. R. H. S. TRACT 9. Archaeological Frauds. Inscriptions attributed to the Mound Builders—Three Remarkable Forgeries, by Col. Chas. Whittlesey, President of the Society. Exposure of the Grave Creek Mound find, the Cincinnati

Tablet, and the Newark Holy Stone, pretended inscriptions to prove the Semitic origin of the aboriginal people of the Ohio Valley. A study by the Author on the scene of the finds. 4 p. February, 1872.

W. R. H. S. TRACT 10. Annual meeting [of the Society] May 13, 1872. Memorial notice of A. T. Goodman, Secretary of the Society. 4 p. May, 1872.

W. R. H. S. TRACT 11. Ancient Rock Inscriptions in Ohio, An Ancient Burial Mound, Hardin County, O., and a notice of some rare Polished Stone Ornaments [in the museum of the Society]. Notes, Letters, description. Edited by Col. Chas. Whittlesey, President of the Society. 16 p.+2 folders, lithographic plates of inscriptions. August, 1872.

W. R. H. S. TRACT 12. Selection No. 3, War of 1812, from the papers of the late Elisha Whittlesey [following Tract 7]. 3 p. November, 1872.

W. R. H. S. TRACT 13. Papers relating to the Expeditions of Colonel Bradstreet and Colonel Bouquet, in Ohio, A. D. 1764. Selection No. 1. Notes, Scraps, Letters, 5 p. February, 1873.

W. R. H. S. TRACT 14. Same. Selection No. 2. Same. 6 p. same date.

W. R. H. S. TRACT 15. Correspondence of Major (George) Tod. (Selection No. 1). War of 1812, (Selection No. 4 following Tract 12). History of Northfield, O., by Irving A. Searles. Reminiscences of early times. 8 p. April, 1873.

W. R. H. S. TRACT 16. List of Publications. Annual Report, 1873. Origin of the State of Ohio [date of its legal existence]. 5 p. May, 1873.

W. R. H. S. TRACT 17. Correspondence of Major George Tod. Selection No. 2. War of 1812 (Selection No. 5, following Tract 15). 5 p. November, 1873.

W. R. H. S. TRACT 18. War Correspondence. Northern Frontier, 1812. Selection No. 6. (Following Tract 17). 4 p. November, 1873.

W. R. H. S. TRACT 19. Biographical Notices and Correspondence—War of 1812. Selection No. 7 (following Tract 18). 4 p. November, 1873.

W. R. H. S. TRACT 20. Discovery and Ownership of the Northwestern Territory, and Settlement of the Western Reserve. An Address delivered at Burton, before the Historical Society of Geauga County, O., Sept. 16, 1873, by Hon. James A. Garfield. [Contains list of authorities used and a valuable reference to the Margry [La Salle] Papers then being published at public expense—in which the Western Reserve Historical Society made the initiatory steps]. 12 p. February, 1874. 2nd ed. 32 p. September, 1881. 3rd ed. 34 p., with cover. Same date. [This tract reappeared under title: The Northwest Territory; Settlement of the Western Reserve. An Address . . . from the published Works of General Garfield by B. A. Hinsdale. 24 p. with cover. Boston, 1885].

W. R. H. S. TRACT 21. Sixth Annual Meeting. Report of the President [Charles Whittlesey]. 3 p. May, 1874.

W. R. H. S. TRACT 22. Battle of Frenchtown, 1813—Major (Isaac) Craig on Lake Erie, 1782—White Men as Scalpers—Geographer General [Thomas] Hutchins. [First to survey land Northwest of the River Ohio]. 8 p. August, 1874.

W. R. H. S. TRACT 23. Relics of the Mound Builders. By C. C. Baldwin, Secretary. Descriptive of pottery taken from mound near Memphis, Tenn., and in the Museum of the Society. Also: Campaign of 1813 on the Ohio Frontier. Sortie at Fort Meigs, May, 1813. Address of Thomas Christian, a Volunteer in Col. Dudley's Regiment. Narrative of Incidents of Indian Warfare. [This article with Tract 1 and part of Tract 22, might be included in the proposed War of 1812 tract]. 7 p. October, 1874.

W. R. H. S. TRACT 24. Recent donations by W. P. Fogg, Esq., with his description and Remarks. [Assyrian Antiquities, etc.]. 4 p. October, 1874.

W. R. H. S. TRACT 25. Early Maps of Ohio and the West. By C. C. Baldwin, Secretary. Description of maps collected and examined with reference to the Geography of Ohio and Catalogue of Maps in possession of the Society. [A valuable contribution to the subject by a special student of maps]. 25 p. with cover. April, 1875. Tract 26 is also bound in this cover which has general title only and page 2, descriptive matter relating to the Society.

W. R. H. S. TRACT 26. Seventh Annual Meeting, May 11, 1875. 4 p. June, 1875.

W. R. H. S. TRACT 27. Notice of Historical Pioneer Societies in Ohio. By C. C. Baldwin, Secretary. Notes of material collected by the author from pioneers in almost every county.

W. R. H. S. TRACT 28. War of 1812 Correspondence—Selection No. 8. [Following Tract 19]. 4 p. October, 1875.

This is the last of a series of War Tracts. They shed light on conditions in the Western Reserve and Lake Erie country during this period of pioneer history and they contain names of the Revolutionary soldiers and pioneers and give incidents and circumstances of interest to their descendants. The supply of some of the tracts being exhausted, it may be well to arrange for the reprinting of the set as one tract with maps, notes and index. Such a tract would be a contribution to Ohio history. It should include these eight selections, and Tract 1 and parts of Tracts 22 and 23.

W. R. H. S. TRACT 29. Tradition of Brady, the Indian Hunter—Letter of General L. V. Bierce to Judge John Barr—Letter of Hon. F. Wadsworth to Seth Day, Esq. Incidents of Border Life involving Simon Girty and telling of Captain Brady's famous leap across the Cuyahoga River at Kent. Ohio. 6 p. December, 1875.

W. R. H. S. TRACT 30. Early Settlement of Warren, Trumbull Co., Ohio, by the late Leonard Case, giving personal reminiscences and a letter of an early settler describing conditions in 1796. Also a review of the Land Title of the Wes-

tern Reserve by Mr. Case, a copy of the first deed, 1788, and a list of original owners of the Salt Tract. 34 p. and cover. March, 1876.

W. R. H. S. TRACT 31. Annual Meeting, May, 1876—Note on the Margry Papers reciting the origin and history of the movement for the purchase and publication of the documents of La Salle in which this Society took the initiative steps. 4 p. May, 1876.

W. R. H. S. TRACT 32. Western Reserve—Origin of Title. By Col. Chas. Whittlesey. Describing the papers in the Archives of the Society bearing on this point. 6 p. June, 1876.

W. R. H. S. TRACT 33. Archaeological Frauds. By Col. Chas. Whittlesey. Following the matters referred to in Tract 9; contains list of Engraved stones with illustrations and a statement as to the fraudulent nature of each. 7 p. November, 1876.

W. R. H. S. TRACT 34. The Margry Papers. Volume one. By C. C. Baldwin. A review of the documents of La Salle contained in the first installment of the collection published by the Government. 7 p. November, 1876.

W. R. H. S. TRACT 35. A centennial Law Suit. By C. C. Baldwin. Relating to the Border Service of George Rogers Clark, in the Revolutionary War. 3 p. December, 1876.

W. R. H. S. TRACT 36. Memoranda and Notes by the late Alfred T. Goodman. 4 p. January, 1877.

Tracts 1 to 36, issued separately as complete were assembled and bound together as a volume. Some of these volumes contain copies of the Trent Journal published through the medium of this Society. Later complete sets of the Tracts, 1 to 36, were issued as Volume I in binding uniform with Volumes II and III.

W. R. H. S. TRACT 37. Ninth Annual Meeting, May, 1877. Contains a report on the collections of the Society in the library, manuscript room and museum. P. 1-7. May, 1877.

W. R. H. S. TRACT 38. Discovery of the Ohio River. By Robert Cavalier de la Salle. 1669-70. By Col. Chas. Whittlesey. References to local signs of the presence of white men in the Ohio Valley noted by the author; with notes on references in the Margry papers. P. 9-15. (No date).

W. R. H. S. TRACT 39. Autograph Letters. A selection of original MSS. from the archives of the Society, relating to border affairs. Patriot War of 1838 (against Upper Canada). Mexican War, 1846-7, and letters of Zebulon Pike, 1801-11. P. 17-24. (No date).

W. R. H. S. TRACT 40. The Iroquois in Ohio. By C. C. Baldwin. Read before the Society December 28, 1868. Relating to the subject of Title. First United States Land Surveys, 1786—Seven ranges in Ohio—Thomas Hutchins, Geographer [notes by Col. Chas. Whittlesey]. P. 25-31. (No date). 2d edition reset. The Iroquois part only. P. 25-32. (No date).

W. R. H. S. TRACT 41. Ancient Earthworks—Northern Ohio. By Col. Charles Whittlesey. With plats of Surveys, Sections, etc. P. 33-39. (No date).

W. R. H. S. TRACT 42. Rock Inscriptions in the United States—Ancient Alphabets of Asia, by Col. Charles Whittlesey. Illustrated, contains list of locations of a number of inscribed rocks in the Ohio Valley. P. 41-55. March, 1878.

W. R. H. S. TRACT 43. Proceedings at the annual meeting for 1878. Tenth Annual Report—Biographical Sketches (of Dr. Jared P. Kirtland and others), p. 59-64. May, 1878.

W. R. H. S. TRACT 44. The Grave Creek inscribed Stone. By Col. Chas. Whittlesey. An examination of all material relating to this Archaeological fraud. P. 65-68. April, 1879.

W. R. H. S. TRACT 45. Numismatics. Facts in regard to Early American Coins prepared by H. N. Johnson, in charge of the department of Numismatics. P. 69-74. (No date).

W. R. H. S. TRACT 46. Revolutionary Correspondence of 1777. Letters to Maj. Gen. Rufus Putnam, 1777, in the Highlands, Burgoyne Campaign, from Washington, and others, found in the Putnam Home at Marietta, Ohio. P. 75-80. (No date).

W. R. H. S. TRACT 47. Early Indian Migrations in Ohio. By C. C. Baldwin. Reprinted from the American Antiquarian, April, 1879, a paper read before the State Archaeological Society of Ohio, in September, 1878. Contains map constructed by author showing supposed position of Indian Tribes of the Ohio Valley. P. 81-95 with cover. (No date). 2d edition, reprint under cover title: Indian Migration in Ohio, p. 15, with cover. (No date).

W. R. H. S. TRACT 48. Annual Meeting of 1878—Eleventh Annual Report—obituaries. [There seems to be some confusion in numbering the annual meetings. The Society was organized in 1867]. P. 97-100. (No date).

W. R. H. S. TRACT 49. [No title] Contents: Report of and notes (1797) on Girdled Road laid out by Connecticut Land Company "from the Pennsylvania Line to the City of Cleveland"—Letter on place of Major Wilkins disaster, 1763, Diary of Capt. James Bonner (1813-14 relating to Fort Meigs). P. 101-104. October, 1879.

W. R. H. S. TRACT 50. Indian Narrative (Wyandots) of Judge Hugh Welch, of Green Springs, Seneca and Sandusky Counties, Ohio.—Wyandot Missions in 1806-7—Diary of Quintus F. Atkins, prepared for the Society by C. C. Baldwin. P. 105-111. (No date).

W. R. H. S. TRACT 51. Gen. Wadsworth's Division, War of 1812, by Colonel Charles Whittlesey. Notes and Correspondence (War of 1812). [This Tract contains a list of Military lines and routes across Northern Ohio, also a List of persons killed in Northeastern Ohio during the Indian troubles.] P. 115-123. December, 1879.

W. R. H. S. TRACT 52. Relics of Aboriginal Arts and their Ethnological Value. Notes, Letters and Illustrations. [By Col. Chas. Whittlesey]. P. 125-128. May, 1880.

W. R. H. S. TRACT 53. Inscribed Stones, Licking County, Ohio. By Col. Chas. Whittlesey. [Further discussion of, with illustrations, the fabricated inscribed Stones. Known as

the Grave Creek Stone, and the Wyrick Find (Newark, Ohio, 1861) known as the Decalogue Stone, following previous exposure of these frauds contained in Tracts 9, 33 and 44]. P. 129-132. March, 1881.

W. R. H. S. TRACT 54. Proceedings of the Thirteenth Annual Meeting. May, 1881. Reports and obituaries. P. 135-150. 1881.

W. R. H. S. TRACT 55. The State of Ohio—Sources of her Strength. Address by President Whittlesey at the Annual Meeting, May, 1881. P. 151-158. November, 1881.

W. R. H. S. TRACT 56. Ancient Burial Cists in North-eastern Ohio. Description of stone tumulus and graves at Parkman, Geauga County, Ohio. Explored August, 1879, by Cornelius Baldwin. P. 159-165. April, 1882.

W. R. H. S. TRACT 57. Proceedings of the Fourteenth Annual Meeting. May, 1882. Reports and obituaries. P. 167-182. 1882.

W. R. H. S. TRACT 58. Biography of Ephraim Kirby, Director in the Connecticut Land Company in 1795, by Dr. Theodatus Garlick. P. 183-186. January, 1883.

W. R. H. S. TRACT 59. Ohio Surveys. By Charles Whittlesey. Points in regard to the Early Surveys Northwest of the River Ohio. P. 187-191. September, 1883.

W. R. H. S. TRACT 60. The Glacial Boundary in Ohio, Indiana and Kentucky. By Prof. G. Frederick Wright. A lecture delivered before the Society, November 27, 1882, with detailed report and sectional plats of the Moraine to the Illinois Line. Appendix giving abstract of bearings of striae and grooves in Ohio. Compiled from the observations of the Second Ohio Geological Survey. Also Effects of the Glacial dam at Cincinnati along the Upper Basin of the Ohio. By Professor I. C. White, of the Pennsylvania Geological Survey. P. 193-278. 1884. [Issued bound in boards with the cover title Terminal Moraine. The survey of the terminal moraine was made under the auspices of the Society and at the expense of certain members]. (Vol. 2, p. 345). 2nd Edition, paper covers. P. 86. 1884.

W. R. H. S. TRACT 61. Surveys of the Public Lands in Ohio. By Col. Charles Whittlesey. Sketch, with outline map. P. 279-286. July, 1884.

W. R. H. S. TRACT 62. The Corporate Birth and Growth of the City of Cleveland. An address to the Early Settlers' Association of Cleveland. Delivered July 22d, 1884. By S. O. Griswold, Esq.; a study of the legal status of the city. P. 287-318, with cover. (No date).

W. R. H. S. TRACT 63. The Geographical History of Ohio. An address delivered at the Annual Reunion of the Pioneers of the Mahoning Valley at Youngstown, September 10, 1880. By C. C. Baldwin. Reprints from the Magazine of Western History. P. 319-332. November, 1884. 2nd Edition. P. 14, with cover. Another edition 12mo, p. 19, with cover. (No date).

W. R. H. S. TRACT 64. Map and description of North-eastern Ohio. By Rev. John Heckewelder. 1796. Reprinted

from the Magazine of Western History. With wood-cut portrait of Heckewelder and reduced facsimile of manuscript map original of which is in the archives of the Society. P. 333-340. November, 1884.

W. R. H. S. TRACT 65. Proceedings of the Sixteenth Annual Meeting, May, 1884. Reports and obituaries. May, 1884. [Title on cover, Seventeenth Annual Meeting]. P. 343-360, with cover. 1885.

In July, 1885, the Society issued a pamphlet of 16 pages giving a partial list of Manuscripts, Field Notes and Maps, pertaining to the Survey of the Western Reserve, in the Archives of the Society. This was at first regarded as Tract 66, but afterwards withdrawn.

W. R. H. S. TRACT 66. Selection 3. Col. Bradstreet's Misfortunes on Lake Erie in 1794. [A general abstract of the papers relating to the subject. By Col. Chas. Whittlesey]. P. 361-363. July, 1886. [Following Tracts 13 and 14]. 2d Edition, reset. [Erroneously marked Tract 67]. P. 3. July, 1886.

W. R. H. S. TRACT 67. Proceedings of the Eighteenth Annual Meeting, May, 1886. Title on cover gives this as the Nineteenth Annual Meeting. Reports and obituaries. P. 364-403, with cover. 1886.

W. R. H. S. TRACT 68. Memorial of Colonel Charles Whittlesey, Late President of the Society. Biographical Sketch, by C. C. Baldwin, and Bibliography of Col. Whittlesey's writings. P. 404-434, portrait, with cover. (No date).

W. R. H. S. TRACT 69. The Origin and Development of the Almanack. A paper read before the Society, January 12th, 1887. By Sam Briggs, vice-president of the Society, with notes on the Almanack in America, and four plates, facsimiles. P. 435-477, with cover. 1887.

W. R. H. S. TRACT 70. The Pre-Glacial Course of Rocky River, O. Read before the Society February 6, 1886, by Dr. D. T. Gould, of Berea, Ohio. With a map of the Preglacial channel. P. 479-490. (No date). [Tract 71 is sometimes found stitched to this Tract].

W. R. H. S. TRACT 71. First United States Land Surveys, 1876. Seven Ranges in Ohio. Thomas Hutchins, Geographer, by Col. Charles Whittlesey. [Reprint of pages 30-31 of Tract 40]. P. 491-495. (No date).

W. R. H. S. TRACT 72. The Battlefield of the Peninsula, Sept. 29, 1812. General Wadsworth's Division, Ohio Militia. By [the late President of the Society] Col. Charles Whittlesey. [In the main this is a reprint of the description written by Joshua R. Giddings, who participated as a volunteer, from the May, 1859, number of The Fire Lands Pioneer, Vol. 1, No. 4, p. 35]. P. 497-504. (No date). [Tracts 37 to 72 constitute Vol. II of the Society Publications].

W. R. H. S. TRACT 73. Archaeology of Ohio. By M. C. Read. Report on State Exhibit prepared for centennial exposition. 200 illustrations, representing specimens, plats, etc. Introduction by C. C. Baldwin, President of the Society. P.

119. (No date). Reissued without Tract number, and also without the Introduction.

W. R. H. S. TRACT 74. Historical Sketch of the Western Reserve Historical Society, Cleveland, Ohio. By D. W. Manchester, Secretary. P. 123-161. May, 1888. 2nd Edition, reprinted, portrait of Col. Whittlesey or C. C. Baldwin, p. 39, with covers. May, 1888.

W. R. H. S. TRACT 75. Discovery of a Palaeolithic Implement, at New Comerstown, Ohio. Report read at a meeting of the Society, December 12, 1890, by Mr. W. C. Mills and Prof. G. Frederick Wright, LL. D. P. 163-177. 4 full page plates, (with cover). [No date]. The Stone referred to is in the Museum of the Society, W. C. Mills, donor.

W. R. H. S. TRACT 76. Abstract of lecture upon The Ancient Earthworks of Ohio, delivered by Prof. F. W. Putnam, of Harvard University, before the Society, October 25th, 1887. P. 177-184. (No date).

W. R. H. S. TRACT 77. Manuscript of Solomon Spaulding and the Book of Mormon. Paper read before the Society, March 23, 1886, by James H. Fairchild, of Oberlin, Ohio. P. 185-200. (No date).

W. R. H. S. TRACT 78. Proceedings of the Twenty-Third (Twenty-Fourth) Annual Meeting, June, 1891. Reports and Addresses. P. 201-216. (No date).

W. R. H. S. TRACT 79. Case School of Applied Science. A biographical sketch of the Founder of Case School of Applied Science, and his Kinsmen. Read at Commencement, June 11, 1891. By James D. Cleveland, a member of the Society. Portrait of Leonard Case. P. 219-254, (with cover), 1891. (This Tract was Reissued by Case School from the same forms).

W. R. H. S. TRACT 80. History of Man in Ohio. A panorama. Address delivered at Norwalk, Ohio, before the Firelands Historical Society, June 25, 1890, by Judge C. C. Baldwin, President of the Society. P. 255-281. (No date). 2nd edition. P. 27, with covers. (No date).

W. R. H. S. TRACT 81. The Ohio Railroad. That Famous Structure built on Stilts. A paper read before the Society, January 15th, 1891, by C. P. Leland, Esq. An account of the first railway project in which the people of Northern Ohio were interested. P. 263-284. (No date).

W. R. H. S. TRACT 82. The Development of Cleveland's Harbor. A paper read before the Society, January 29th, 1891. By John H. Sargent, Esq. P. 285-298. (No date).

W. R. H. S. TRACT 83. The Early History of Lorain County (Ohio). Address by W. W. Boynton, before the Lorain County Agricultural Society. Elyria, O. July 4, 1876, and published originally by that Society. Reissued by the Society as Tract 83. P. 299-366. (No date).

W. R. H. S. TRACT 84. Traces of the Ice Age in the flora of the Cuyahoga Valley, delivered by Prof. E. W. Claypole, of Akron, Ohio, before the Society, February 24th, 1891. P. 365-380. (No date).

Tracts 73 to 84 constitute Vol. III of the Society Publications.

W. R. H. S. TRACT 85. Charter and Re-organization of the Society, 1891-2. Purchase of the Society's Building, Patrons, Life-members, and Corresponding Members, 1894. Frontispiece, Western Reserve Historical Society Building, Public Square. P. 22, (with cover). 1895.

W. R. H. S. TRACT 86. Farm Life in Central Ohio Sixty Years Ago. By Martin Wecker. (Reprinted from previous publications in 1892 with additions). Reminiscences, illustrated with numerous cuts. P. 23-87, (with cover). 1895.

W. R. H. S. TRACT 87. The Underground Railroad. By James H. Fairchild, D. D., Ex-President of Oberlin College. An address before the Society, January 24, 1895. Sketch of the history of the famous system for keeping fugitive slaves from the river to Canada in operation in Ohio before the war. P. 89-121. 1895.

W. R. H. S. TRACT 88. Memorial of Charles Candee Baldwin, LL. D., Late President of the Western Reserve Historical Society. By G. Frederick Wright, with portrait. A sketch of his life, a list of his writings. P. 123-173. (With cover). 1896.

W. R. H. S. TRACT 89. Journal of Michael Walters, a member of the expedition against Sandusky in the year 1782, from the original MS. book in the Archives of the Society. With 2 full page reproductions. Edited by J. P. Maclean. P. 175-188. 1899.

W. R. H. S. TRACT 90. The Archaeological Collection of the Western Reserve Historical Society. By J. P. Maclean. Published for the Society by a member. P. 189-272. Illustrations. 1901.

Western Reserve and Northern Ohio HISTORICAL SOCIETY.

NINTH ANNUAL MEETING, MAY, 1877.

TRACT THIRTY-SEVEN.

The annual meeting of the Western Reserve and Northern Ohio Historical Society was held at the rooms, Tuesday evening May 8th, Charles Whittlesey, president, in the chair.

ANNUAL REPORT.

The Centennial year has been, as was expected, a year of great historical activity. The most marked progress of the last year, however, is the solid labor that has been done in the rooms of our society. It was clearly seen that in completing the catalogue the

LIBRARY

must be classified. There was not, however, room to do this, and it was necessary in the outset to prepare new cases so that books similar in kind might be kept together. These have been made and have been for some months in the rooms. The books were then rearranged in the cases under the following

CLASSIFICATION:

Cases Nos. 1 and 2, are, as formerly, filled with the books and papers of the Sanitary Commission and publications relating thereto.

The general library is classified as follows:

Case No. 3—Books relating to Ohio.

Case No. 4—Early French, Indian, and Canadian history, antiquities, and ethnology.

Case No. 5—General history of the United States, including wars in succession, and general travel within its limits.

Case No. 6—Genealogy, biography, and miscellaneous.

Case No. 7—Official publications of the United States.

Cases Nos. 8, 9, 10, and 11—Books relating to the various States, the States being arranged alphabetically, including in each State the publications of Historical Societies of those States and local histories.

On the other side of the room are newspapers, atlases, and Kingsborough's "Antiquities of Mexico," which fit on rollers better than in

the case. Such is the general system, from which it is hoped no radical departure will have to be made. Ohio reaches far into case No. 4, and a new one should be set against the wall, in which should be placed the State publications. By shelves thus placed much room might be obtained at small expense. The case intended for the publications of the United States will not hold half the books assigned to it. This should be supplemented in the same manner as suggested for the Ohio case.

The newspapers, of course, occupy considerable room, but they are a form of literature which constantly increases in historical value. They are now on the west side of the room, and are also piled up under the museum cases, where they are partially out of the way and yet accessible.

Advantage was taken of the rearrangement of the library to systematize and supplement as far as we could that too little appreciated literature of

PUBLIC DOCUMENTS.

The value of these books increases rapidly in proportion to the completeness of the set. Other public libraries are now paying considerable attention to this subject. Yet it is said that no State, except those admitted into the Union in the last few years, possesses a complete set of its own publications. The varied historical and other information in State and United States books would surprise any one who has not examined them.

Mr. Henry N. Johnson has been special committee upon this branch of the library, and an acknowledgment is due him for his very efficient labors in that behalf. Hundreds of volumes have been brought in from various sources, and the collection is in some particulars very complete, and yet everywhere incomplete. State documents prior to 1865 are difficult to obtain. City documents, I am sorry to say, are almost entirely wanting, and the city itself can supply but few.

In any of these branches, no gift however small but has its value. The very book wanting to help fill a set will likely be some single volume sent in alone. After the arrangement of the bound books logically followed

THE PAMPHLETS,

practically inaccessible when unarranged. These have been sorted in accordance with the general classification of the library, stitched in convenient volumes, and covered with neat paper covers. This was a work of much more labor than sorting the books, but the result is very satisfactory. Three thousand nine hundred and twenty pamphlets have been thus stitched into a form that answers very well indeed, the place of binding, until some future day when the society shall have a binding fund.

The plan answered so well on pamphlets that we tried it next on the

NEWSPAPERS

which formerly littered up the rooms. Stitched in stout paper covers they are very accessible and neat. Especially in this connection should credit be given to Mr. Homer Ritter, a young engineer of the city, whose mechanical skill in stitching, making casts and map drawing, has supplied a want in the Society. It is really a loss to the Society that his increasing business now leaves him but little leisure for such pursuits, in which he displays great taste and intelligence.

THE STATISTICS OF THE LIBRARY

are as follows, by actual count:

Number of books	2,718
Bound newspaper volumes	567
Unbound and stitched do	103
Pamphlets	3,920
Duplicate books	222
Duplicate pamphlets	175
Bound and other manuscripts	178
Scrap books	52

A CATALOGUE

has been almost promised in previous reports. It should be said that funds are provided, and that months ago a contract was made for the writing of the greater part of it, but we are obliged to report that almost nothing has been done under the contract.

VISITORS

to the museum for the last year are registered as follows:

Quarter ending August 1st, 1876	756
Quarter ending November 1st, 1876	397
Quarter ending February 1st, 1877	859
Quarter ending May 1st, 1877	1,039
Total	3,101

There have been probably several hundred not registered. The use of the library has materially increased during the past year, partly in general historical and archæological research, and partly in

GENEALOGY,

In this branch, which, when properly studied, brings us into intimate acquaintance with our ancestors, and the most valuable part of history, there are unmistakable signs of a growing interest. A person cannot wish to know

how his ancestors lived without a wider interest in the modes of life and history of their times. Four of our members are preparing with a view to publication genealogies of their respective families.

THE COINS

have a new and expensive case, which adds much to their attractiveness. There are yet treasures in medals, casts, and Colonial and Continental currency which should have a chance to be seen.

THE STAMPS

have been placed in general charge of Master Perry Hobbs, who has neatly arranged them in albums. For the

AUTOGRAPHS

some person is needed who will arrange them in an accessible and proper manner. Among the needs also are new cases for the

MUSEUM.

Donations brought into the room have not been as numerous in the last as in former years. The cases we have are almost too full. It looks to our visitors as if we had not room for their gifts. In fact there are in waiting outside of our rooms, already gathered for our society, valuable and unique relics enough to fill one case as soon as it shall be furnished. There is room for several, and our friends may rely upon it that the cases will be furnished and their gifts displayed.

The subject of

PLASTER CASTS

is one to which we desire to call the attention of some of our members with a taste for such work. As archæology becomes a science casts becomes more important. No collection of antiquities can be made complete. For instruction, a good well-colored, well-weighted cast, with a knowledge of the material and place of find, is about as valuable as the original. We already have valuable offers of exchange which we cannot accept for want of the casts.

During the past year a part of the relics exhibited at Philadelphia by the State Archæological Society of Ohio were collected from different parts of the State and distributed at our rooms. We have made molds of as many of the rarer of them as was proper and desirable and have the material for valuable exchanges if some one will make the casts.

One learned archæologist of a neighboring State has 100 molds ready to exchange casts with us when we can do so, and we have applications for such exchange also from foreign countries.

THE HISTORICAL SCRAPS

from the 500 papers of the State have not been so numerous as might be expected. The value of the collection we are making, however, can hardly be over-estimated. It is almost certain that an article in a newspaper will be lost to the future historian unless preserved in some public manner. There have been arranged by counties and pasted into scrap books during the past year—fifteen quarto closely filled volumes—and something is yet to be done. Great praise is due to the newspaper press of Lorain county. The matter embraced in the papers there for

the last two years would make a quite complete history. We give special thanks, too, to Mr. Reedy, of the Constitution, and to Mr. Washburn, of the Democrat (now Republican and Democrat), of Elyria, and to the editor of the Wadsworth Enterprise, who have kept us supplied with complete files of their papers. The scraps have been placed in charge of Mr. I. D. Faxon as a special committee, to whom the society is under great obligations in this behalf.

THE TRACTS

published this year have been:

No. 31. Annual meeting of May, 1876.
No. 32. Western Reserve, Origin of Title, by President Whittlesey, June, 1876.

No. 33. Archaeological Frauds (illustrated), by President Whittlesey, November, 1876.

No. 34. Review of the First Volume of the Margry Papers, by C. C. Baldwin, November, 1876.

No. 35. A Centennial Lawsuit, Francis Vigo, and The Expedition of General George Rogers Clark, by C. C. Baldwin, December, 1876.

No. 36. Memoranda and notes, by the late A. T. Goodman, on the Bison and Buffalo in Ohio. Statement of General Sanderson, of Lancaster, O. Major Amos Stoddard, Cleveland, war of 1813, January, 1877.

Our tracts were an accidental outgrowth of impressions of newspaper articles, and in the aggregate contain much valuable matter, and those already out make a very respectable volume. There was issued this year a title and index. Complete sets are very scarce, but few being printed of the first tracts, and those freely distributed. It seems as if the time was not far off when they should be more regularly published.

The second volume of the Margry Papers is published, and it is expected the others will follow rapidly. Among

THE GIFTS TO THE LIBRARY

during the year are, as complete a set of the publication of the Pennsylvania Historical Society as could be furnished, presented through Mr. John Jordan, Jr., an officer and very leading member of the society. It is supplemented by volumes from another source, so that our set of these books so valuable to our history is complete. The histories relating to the settlement of Ohio, are of Canada, New York, Pennsylvania, and Virginia.

We have also received, by the kindness of James Stevenson, Esq., of Quebec, president of the Literary and Historical Society of that city, a set, not complete, but as nearly so as practicable, of its very interesting publications. We received twelve volumes.

We are also under special obligation to Colonel Albert H. Hoyt, of Boston, one of our most valued corresponding members; S. A. Green, M. D., of the same city, and to the Massachusetts Historical Society.

In this city General John Crowell has kindly presented us with the National Intelligencer from 1830 to 1855, the first twelve volumes of the Tribune, and twelve other volumes. From Professor J. L. Cassells, thirty-five bound volumes. In the department of public docu-

ments we are under most obligation to Hon. William Bingham, Hon. O. J. Hodge, and Hon. William C. McFarland.

A collection has been made of literature relating to the Centennial Exposition, for which we are especially indebted to the patient and persevering kindness of George W. Howe, Esq.; also to Hon. F. W. Green, of the Ohio Commission, and to some of the officers of the society at Philadelphia. The collection numbers over 100 books and pamphlets, part in paper and part in cloth.

MANUSCRIPTS.

Our most valuable manuscript acquisitions during the past year have been from the late L. V. Bierce, of Akron, the original manuscript copy of the Epitome of the History of the Western Reserve, from 1662 to the formation of the State Constitution in 1802, with an appendix. History of Mounds and Mound Builders. From H. R. Gaylord, Esq., of Saginaw, Mich., copies (several hundred pages of manuscript) of original newspaper articles, published many years ago under the auspices of the Ashtabula County Historical Society. Many of the articles were by the late Quintus F. Atkins, relating to all parts of the Reserve and of great interest.

From Rev. Stephen D. Peet, of Ashtabula, copy of the journal from 1803 to 1806, of Rev. Joseph Badger, an early missionary on the Reserve. Copy of the journal of Dr. Manassah Cutler, August 12th, 1788, to October 14th, 1788, during a trip to the settlement made by the Ohio Company at Marietta that year, the first settlement of Ohio.

For additions to the museum we are under special obligation to Mr. D. C. Baldwin, Mr. Wallace and Mr. C. L. Young, of Elyria; Mr. Sheldon and Mr. Jay Terrill, of Sheffield; Dr. G. W. Peckham, of Elyria, and to the Historical Society of Ashtabula county. Three gentlemen, Hon. A. T. Nye, of Marietta; G. W. Hill, M. D., of Ashland, and Rev. J. P. McLean, of Clyde, have been publishing series of valuable articles on local history and antiquities, which they kindly send us.

We should also mention a series of articles on Elyria and Lorain counties, twenty-six in number, by N. B. Gates, Esq., of Elyria, a set of which we received from him some time ago, which are placed in a scrap book by themselves. All our donations have heretofore been acknowledged in the usual way, in the newspapers, and by card or letter.

OUR COLLECTION OF MAPS

has been considerably added to during the past year and approaches a satisfactory completeness for illustrating Western history. We need several early maps still in manuscript, and never published, as well as other manuscripts of a geographical nature; and also a very few printed maps.

Hon. John R. Bartlett, of Providence, kindly sent us some weeks since, in behalf of Mrs. Brown, some fac similes from the library of the late John Carter Brown, which we now present to the meeting, and as his letter possesses an unusual geographical interest we append it to this report.

Considerable interest is being awakened abroad in our collection, and we have had dur-

ing the year a great number of queries to answer. Since last November Mrs. J. C. Schermerhorn has performed very acceptably the duties of librarian.

FINANCES.

The Amount in the hands of the Treasurer	
last year was.....	\$ 59 56
Increase th ^t present year.....	829 16
	\$888 72
Expended.....	888 19
Balance.....	\$ 53

The year has not been a favorable one financially. Let us hope we have seen our hardest times. The officers have also been so very busy in other work of the society that they have had little time to look after memberships. We hope it appears that a little money has been well expended, and that the annual membership should be extended and increased. Our society has arrived, after ten years of rapid growth, at that stage when the labors should be subdivided somewhat with persons so inclined to look after departments. The secretary, for one, has felt somewhat burdened with his multifarious labors, but believes that an active interest in our society is increasing. We would suggest, in conclusion, that every one can do something. Single books, pamphlets, or relics collectively are valuable. Our property has accumulated largely in that manner. Local books, pamphlets, and scraps are not easily gathered in any way but by voluntary contribution. Especially do we ask pamphlets from persons in other counties, for a collection of pamphlets from any county will tell much of its history.

Appended hereto are brief obituary notices of the following members and friends of the society: Randall P. Wade, Judge Samuel Starkweather, J. A. Harris, General Kent Jarvis, Edwin C. Rouse, and General Lucius V. Bierce. Respectfully submitted.

C. C. BALDWIN, Secretary.

On motion Messrs. John W. Allen, H. B. Tuttle, and H. G. Cleveland were appointed a committee on nominations.

The following gentlemen were nominated and elected curators for three years: D. P. Eells, G. E. Herrick, and H. N. Johnson.

The following resolution was then adopted:

RESOLVED, That the thanks of this association be tendered to the president and secretary and their associates, Messrs. Johnson and Faxon, for the very efficient manner in which they have performed the duties of their respective offices. These duties have involved a large expenditure of labor and time, which has been given without compensation, and with great earnestness, zeal, and talent.

OBITUARIES.

RANDALL P. WADE.

Randall P. Wade, a life member of our society and at one time a curator, died on the 24th of June, 1876. He was of an old New Jersey family, born on the 26th of August, 1835, and was son of J. H. and Rebecca A. (Facer) Wade. He came here with his father in 1848. It was not necessary for him to en-

gage in active business. He was, however, by constitution active, though not strong and his faithfulness and integrity were well known. He was public spirited, and took such an interest in charitable movements as promised much future usefulness. He married Miss Anna R. McGaw, of Columbus, O., and left two children.

JUDGE STARKWEATHER.

Judge Samuel Starkweather, one of our first corporators (in 1867), died on the 5th of July, at the ripe age of 77 years. He had been a resident of Cleveland since 1827, a member of the board of village trustees, 1837-1844, six years Mayor of the city, commencing in 1844, and five years a Judge of the Court of Common Pleas, commencing in 1852. His family was connected by marriage with that of Ephraim Kirby, one of the directors of the Connecticut Land Company. He naturally took a lively interest in the local history of the Reserve, which was colonized from New England, having been born at Pawtucket, Rhode Island.

J. A. HARRIS.

On the 21st of August Josiah A. Harris, another lover of pioneer history and a persistent friend of this institution, died in this city at the age of sixty-eight. From his early life Mr. Harris had been an editor, first at Elyria, O., and from 1837 to 1865 of the Cleveland *Herald*. A full and reliable biographical notice of Mr. Harris appeared in the *Herald* of August 22d, which we hope to see published in pamphlet form.

He was one of our self educated Pioneers, who rose to eminence as a literary writer. There were very few Pioneer meetings or family reunions in Cuyahoga or Lorain counties where he was not a guest.

GENERAL KENT JARVIS.

Early in the present year, on the 15th of January, Kent Jarvis died at Massillon, O., at the age of 75 years. Like most of the old settlers he felt a deep interest in the objects and success of our society, assisting us in both a literary and financial way. A very interesting sketch of his journey to Ohio in 1822 was furnished us and published in the *Herald* October 5th, 1871. It is preserved among our papers for future publication.

EDWIN C. ROUSE.

Mr. Rouse was a son of the late Deacon Benjamin Rouse, and born August 12th, 1827. He came to Cleveland when three years old. He was a very active and well known business man. He was for eight or nine years secretary of the Sun Insurance Company, having sole charge of its business. On the death of the late Stillman Witt, in 1875, he was made president and treasurer. He was also president, for a number of years, of the Cleveland Board of Underwriters. He was a man of excellent, quick judgment, great executive ability, public spirited, and efficient. He died in 1876. He was an annual member of our society.

GENERAL LUCIUS V. BIERCE.

On the 11th of November, 1876, General Bierce, one of our life members, died at

Akron, O., having reached the age of seventy-five years. His father removed from Cornwall, Conn., to Nelson, Portage county, O., in 1816. Soon after the young man determined to have a college education, which it was necessary for him to accomplish by his own exertions. He traveled on foot to the Ohio University at Athens. By manual labor and by teaching, he succeeded in graduating there in 1822, without much assistance from home, the father having as great difficulties to overcome on the new farm at Nelson as the son at Athens. His diploma came, burdened with a debt to the college for tuition, such as many a graduate of those days was obliged to incur. Mr. Bierce strapped a knapsack to his shoulders and started on a pedestrian tour through the Southern States in search of employment as a teacher. He secured a position as principal in an academy at Lancaster, S. C., studied law, paid his obligations at Athens, and in 1823 was admitted to practice in Alabama. From thence he returned on foot to Portage county, O., continued his studies in the law at Ravenna, and settled there as an attorney.

He was soon elected prosecuting attorney for the county, where he became an excellent criminal lawyer. When the patriots of Canada determined to inaugurate a revolution, their principal hopes lay in assistance from the United States. A secret society was formed in Northern Ohio under the name of the "Grand Eagles," of which Mr. Bierce was an active member. Late in 1837 he was coming to Cleveland on a canal boat to attend to legal business in the County Court. About a mile from the Court House a crowd of men stood upon the tow-path who cheered him as General of the Patriot forces. The boat was laid alongside the bank, where he was compelled to abandon his contemplated business and depart at once to Detroit. His commission, from which he derived the title of General, is among the archives of this association.

The Canadian revolution soon came to an inglorious end, and General Bierce returned to his practice at Ravenna. When the county of Summit was organized he removed to Akron, where he resided until his death.

During the active portion of his life he was an assiduous collector of local historical items. He visited all the townships of Portage, Summit, and Geauga counties to procure the narratives of old settlers from their own lips. It was one of the strongest desires of his old age that these reminiscences might be published in a permanent form. For most of the townships in the three counties above named he had published histories in the newspapers, and also of many townships in Trumbull and Lorain counties. For Summit county they were collected and printed in a cheap book form without his consent.

He had prepared these town histories for publication, arranged in scrap-books. As one of the pioneers and a life-long companion of theirs he labored incessantly to place their privations and their undaunted resolution upon record. Every people possessed of hardihood dominate over those who have it not. New England became

the ruling power of the United States because of the privations her citizens underwent, extending through a century and a half.

The same people with the same energy moved westward after the close of the Revolutionary war. Ohio, especially Northern Ohio, received enough of this element to inaugurate a great State. These qualities are the results of good parentage and of education.

One of the modes of diffusing intelligence which characterizes New England men is the preservation of historical records. They preserve the history of their ancestors, as a matter of duty and of pride. People who neglect to do this proclaim to the world a want of filial interest, and indicate their own decline. General Bierce placed the proper value upon local personal biography, upon which he spent more time than any of his contemporaries. We hope his accumulation of notes, scraps, and town histories may yet be published in book form.

THE BROWN COLLECTION.

PROVIDENCE, January 20, 1877.

C. C. Baldwin, Esq., Secretary:

DEAR SIR: Since reading your article in the publication of the Western Reserve Historical Society on early maps of America, it has occurred to me that a few fac-similes of very early maps, executed for the catalogue of the library of the late John Carter Brown, might be acceptable to you. I therefore send you the following, which please accept from Mrs. Brown:

1. A map from Stobnicza's Introduction to the Cosmology of Ptolemy, printed at Cracow in 1512. The book itself is rare, and it is stated by Harrisse in his *Bibliotheca Americana Vetus*, Nos. 69 and 95, that no copy of the map belonging to the work is known except the one in the Imperial Library at Vienna. It was from the Vienna copy that the map sent you was taken.

It represents the New World before it had received the name of America, and when but a small portion of the eastern coast was known.

Above the 40th parallel of north latitude are the words: "*ortus de bona ventura*," beyond which the continent extends to latitude 50 deg. N. On the main land, in latitude 30 deg. N. occurs the name of Isabella. There are two large islands corresponding in their positions relatively to the continent with Cuba and Hispaniola, the former not named, and the latter bearing the name of *Spagnolla*. A peninsula in the Gulf of Mexico in the direction of Yucatan has beneath it the name of *Arcay*. Eastward, along the same coast, is the incomplete title of "*caput de sta de*." Proceeding in the same direction, in lat. 10 S., are the words *Gorffo Fremoso*, and at the extreme easterly point of the South American Continent, *Caput S. Crusis* (c. St. Augustine). In lat. 25 deg. S., still along the coast, we have Monte Fregoso. The continent terminates at the end of the map in lat. 50 deg. S., with the name of *Allapega*.

On the west side the continent is limited by straight lines running N. and NW., showing that this coast was unknown. The larger territory is called *Terra incognita*, and near the coast, opposite the Gulf of Mexico, is a great island, *Zipanges insula* (Japan), and

farther west is the eastern portion of Asia. The island at the far north was doubtless meant for Iceland.

2 The second map is taken from *Solinus Camer's Polyhistoria*, printed at Venice in 1520, and is the earliest map known which bears the name of America. Upon it the American continents are separated. The northern, which is the smaller and surrounded by water, is styled "*ulteriora terra incognita*." On the southern we read "*Anno 1497, hac terra cum adiacetibus insulis inventa est per Columbum Januensem ex mandato regis Castellae America provincia*."

At the time this map was published Cape Horn had not been passed, and the western limits of the American continent were hence unknown.

3. Fac simile of the map from Sir Humphrey Gilbert's "Discourse of a Discoverie for a New Passage to China,"—London, 1576. It shows both of the American continents as well as Europe, Africa, and the larger portion of Asia. The names on the map are so distinct that it requires no explanation from me.

4. A reduced fac simile of the map in the voyages of the brothers Zeni, printed in Venice in 1558.

There has been so much said about the Zeni and their voyages that I will not enter into the subject. You doubtless have the books in which the question has been discussed.

5. A fac simile of the first page of Ptolemy's *Cosmography* of 1482

Hoping these fac similes may be acceptable to your society, I am very respectfully yours,

JOHN R. BARTLETT.

The Brown collection is rich in geographical works, containing early maps showing the progress of discovery in the New World. Of the Ptolemies alone we have fifteen editions between 1475 and 1548.

OFFICERS.

President—Charles Whittlesey.

Vice Presidents—J. H. Salisbury and E. Sterling.

Secretary—C. C. Baldwin.

Treasurer—S. Williamson.

Librarian—Mrs. J. C. Schermerhorn.

Legal Trustees—William Bingham, J. P. Bishop, George Willey.

CURATORS ELECTIVE.

Term expires in 1878—C. C. Baldwin, Mrs. Alleyne Maynard, C. T. Sherman.

Term expires in 1879—Joseph Perkins, Charles Whittlesey, John W. Allen.

Term expires in 1880—H. N. Johnson, D. P. Eells, G. E. Herrick.

PERMANENT CURATORS.

W. J. Boardman, James Barnett,
William Bingham, H. M. Chapin,
B. A. Stannard.

PATRONS.

Leonard Case, William J. Gordon,
Joseph Perkins, John F. Warner.

LIFE MEMBERS.

John W. Allen, N. C. Baldwin,
Miss Sarah L. Andrews, Dudley Baldwin,
P. H. Babcock, John D. Baldwin, Worcester, Mass.,
C. C. Baldwin,

S. C. Baldwin,
J. P. Bishop,
H. C. Blossom,
Wm J. Boardman,
A. Bradley,
O. A. Brooks,
A. E. Buell,
Leonard Case,
W. S. Chamberlain,
H. M. Chapin,
O. A. Childs,
Wm. Chisholm,
Abira Cobb,
Wm. Collins,
A. G. Colwell,
D. W. Cross,
K. K. Cutter,
Wm. M. Darlington,
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J. H. Devereux,
L. C. Draper, Madison, Wis.,

John Erwin,
M. F. Force, Cincinnati,
A. W. Fairbanks,
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J. A. Garfield, Hiram,
Theodatus Garlick,
W. J. Gordon,
Miss L. T. Guilford,
C. F. Glaser,
T. P. Handy,
S. V. Harkness,
H. A. Harvey,
C. C. Hale,
Peter M. Hitchcock,
L. E. Holden,
Franklin B. Hough,
Lowville, N. Y.,
Colgate Hoyt,
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Western Reserve and Northern Ohio HISTORICAL SOCIETY.

DISCOVERY OF THE OHIO RIVER, BY ROBERT CAVALIER DE LA SALLE, 1669-70.

BY COL. CHAS. WHITTLESEY.

TRACT THIRTY-EIGHT.

What is designated on the early maps of the United States as the "Territory Northwest of the Ohio" embraced all the country east of the Mississippi and north of the Ohio river. Great Britain acquired it from France by the treaty of February, 1762, but having prior claims to it, had before that time granted most of the territory to her several colonies. Probably there were not more than 3,000 white people in the territory when this treaty was signed, and these were principally wandering French traders; very few of them cultivators of the soil. In 1778 Virginia conquered the Northwest from Great Britain, and erected the entire territory into a county, by the name of Illinois. Soon after the close of the war of the revolution, in the year 1787, the United States established in the same region its first provincial government, and gave it the above title, which in common parlance was known as the "Northwestern Territory." Its fixed population did not then exceed 5,000. There are now five States, and the half of a sixth, whose inhabitants number not far from 10,000,000, among whom the French element is scarcely perceptible.

The people of these States are intelligent, and take a lively interest in the history of the discoverers of their country, among whom La Salle holds the first place.

Having spent a life of the length usually allotted to man, on the waters of the Ohio, the Upper Mississippi, and the lakes, threading many of the streams on which they floated their canoes, passing over the same

trails, coasting along the same shores, those intrepid explorers of two centuries since, have often been in imagination, vividly near to me.

While investigating the discovery of Ohio, in addition to works in the library of our society I had the use of those in the library of our secretary, Mr. Baldwin, which, on this subject, is more full than our own. I have also had his cordial assistance in comparing authorities, and particularly in the comparison of maps, covering the period from 1618 to 1760, of which he has the best collection west of the Alleghanies.

I cannot make full references to the books and maps we have consulted, for it would occupy too much space, but only to those which are the most rare and most important.

It was my first intention to embrace La Salle's explorations on the Mississippi, but soon found that his discoveries in the Ohio country, would occupy at least one paper. As to his operations on the Mississippi there are still open questions on which there are divisions of opinion among our best historians.

As early as 1840 I saw evidence of the presence of white men in Northeastern Ohio, of whom we had then no historical proof. This evidence is in the form of ancient cuts, made by sharp axes on our oldest forest trees, covered by their subsequent growth. In this climate the native trees are endogenous, and take on one layer of growth annually. There are exceptions, but I have

tested the accuracy of this habit, in about forty cases where I have had other proof of the age of the tree, and find it to be a good general rule.

The Jesuit relations contain no account of establishments on the south shore of Lake Erie in the seventeenth century. For many years these wooden records remained an interesting mystery, which I think may possibly be solved by recent documents brought to light in France. We knew that La Salle in 1680 returned from the Illinois to Montreal most of the way by land, and had conjectured that he may have traversed the south shore of Lake Erie; but the passage of a few men hastily through a wilderness did not account for the many marks of axes which we find.

The stump of an oak tree was shown me soon after it had been felled in 1838, which stood in the northwestern part of Canfield, Mahoning county, O. It was two feet ten inches in diameter, and, with the exception of the concealed gashes, was quite sound. When about fourteen inches in diameter, this tree had been cut nearly half through; but the scar had healed over so thoroughly that it did not appear externally. I took a section from the outside to the heart, showing both the old and the recent axe marks, which may be seen in the Museum of the Western Reserve Historical Society, at Cleveland. Over the old cuts there had grown 160 annual layers of solid wood, and the tree had died of age some years before. This would place the cutting between the years 1670 and 1675. The tree stood a few miles south of the great Indian trail leading from the waters of the Mahoning, a branch of the Ohio, to the waters of the Cuyahoga rivers and Lake Erie. In 1848 or 1849, Mr. S. Lapham, of Willoughby, Lake county, O., felled a hickory tree, standing a short distance from the ridge, along which was once the main Indian trail parallel to the lake. The diameter of the stump was about two feet. Near the heart there were very distinct cuts of a sharp, broad-bitted ax. Mr. Lapham preserved a piece of this tree, that is now in our museum, donated by Professor J. L. Cassells. The annual layers of growth are very thin, and difficult to count, but are about 400 in number, outside the ancient chopping. Another tree was found in Newburgh, Cuyahoga county, O., more than thirty years since, with marks of an ax near the center, represented to have 150 to 160 layers of growth over it; apparently the work of a sharp, broad-bitted ax.

In the cabinet of the Ashtabula Historical Society, at Jefferson, Ashtabula County, O., there was, some years since, a piece of wood with ancient ax marks of about the same

date. I have heard of two others in Northeastern Ohio, which I have not seen, and which may have been the work of a dull, narrow bitted ax in the hands of a savage, and not the work of white men; but the Indians of Northern Ohio could not have long been in the possession of metal tomahawks or squaw hatchets, in the year 1670. Such cuts, if made by them, could be only a few years more ancient.

The Lake county stump has about twice the number of layers we should expect, and which would carry the chopping to a period before the landing of Columbus. Botanists explain this by the exceptional cases where there is a double layer in a year. If La Salle and his party spent two or three years exploring and trading in furs in the lake country, they might well be the authors of these ancient cuttings. There must have been several hundreds of them, or we should not have met with so many at this late period. Any person examining the pieces in the Western Reserve Historical Society Museum will be convinced they are not the work of Indians.

The honor of the first exploration of Ohio has long been claimed by the French for their countryman, Robert Cavalier de La Salle, but the details of this exploration were so meager, its date so doubtful, and the extent of his travels so uncertain, that some historians were not inclined to give credence to his claims.

A romantic mystery still envelopes his movements in the country between Lake Erie and the Ohio river, which it was hoped the papers of M. Pierre Margry would dissipate, and thus place La Salle on record in full and clear terms. If this cannot be effected by the zeal and the industry of M. Margry, during a life work in search of manuscripts relating to La Salle, I fear that we must relinquish the hope of a satisfactory solution.

De Courcelles and Talon, who were respectively Governor and Intendant in New France, sent out several parties of discovery between 1665 and 1680. They had two principal objects in view; the *discovery of copper, and a route to China through the Great Southern Sea.*

In a memoir to the King, dated Quebec, October 10th, 1670, (New York Colonial Documents, page 64) Talon writes: "Since my arrival I have despatched persons of resolution, who promise to penetrate farther than has ever been done to the west and northwest of Canada; and others to the southwest and south." These parties were instructed to keep journals, reply to instructions, take possession of the country formally, and were expected to be absent without news for about two years.

After all these precautions, a distressing fatality overtook most of their letters, field notes, reports, and maps. Jolliet was nearly in sight of Montreal on his return in 1674 from the Mississippi river, when his canoe was capsized in the rapids, he was nearly drowned, and every paper was lost. From La Salle's memoranda, covering the years 1669 to 1673, nothing has been recovered.

In 1686, Governor Denonville, writing from Quebec under date of November 8th, to Seignelay, Minister of Marine, says: "I annex to this letter a memoir of our right to the whole of that country (Ohio), of which our registers ought to be full, but no memorials of them are to be found. I am told that M. Talon has the original of the entries into possession, of a great many discoveries that were made in this country, with which our registers ought to be full. Doubtless he has given them to my late Lord, your father."—[Colonial Documents, vol. 9, page 297.

LA SALLE ON THE OHIO.

Instructions to M. Duquesne, Paris, 1752, (Colonial Documents, N. Y., vol. 10, page 243): "The River Ohio, otherwise called the Beautiful river, and its tributaries belong indisputably to France, by virtue of its discovery, by the *Sieur de la Salle*, and of the trading posts the French have had there since. * * * It is only within a few years that the English have undertaken to trade there."

Instructions to Vaudreuil, Versailles, April, 1755, (Colonial Documents, vol. 10, page 293): "It is only since the last war that the English have set up claims to the territory on the Beautiful River, the possession whereof has never been disputed to the French, who have always resorted to that river ever since it was discovered by *Sieur de la Salle*." As the Jesuits in Canada were personally hostile to La Salle, they never mention his name in their relations, or the discoveries made by him.

They were jealous of him as a discoverer and a trader, despised him as a friend of the Sulpiciens, and an apostate from the Society of Jesus, an order at that time so powerful in Canada that the Governor General was obliged to compliment them in his open dispatches, while he spoke severely of them in cypher.

Louis XIV. was not required to expend more money in wars than other French monarchs, but his civil projects were ample, and his pleasures very expensive. He was habitually straitened for funds, and required the strictest economy in the expenses of all his officers.

In Canada parsimony in public affairs was

even more rigid than in France. The Governor General was unable to live on his salary. Intendants, ecclesiastics, and local Governors, were in a still worse predicament. It was expected that all of them would make up this deficiency by traffic in furs. Many of the dispatches from Versailles are laden with warnings against incurring expenses, which amounted to commands. Many of those sent in reply contain passages congratulating the King on acquisitions of territory and glory, which cost him nothing. Three-quarters of a century later, as related above, in negotiations with England, the Ohio country was claimed by the French, on the sole ground of the discoveries of La Salle.

The personal interest which public officers had in the Indian trade, of necessity brought about discord between them. La Salle, having no fortune, was obliged to sustain himself in the same way; which brought him in direct antagonism with officers, priests, and traders. This reference is necessary to explain the difficulties under which he labored.

According to the Abbe Galinee, Governor De Courcelles requested himself and De Casson, another Sulpicien, to join La Salle in a voyage he had long contemplated, toward a great river which he conceived, from the accounts of the Iroquois, to flow westward, beyond which after seven or eight months of travel, in their way of stating it, the river and country were lost in the sea.

By this river, called by them the Ohio, Olighiny-sipu, or Beautiful River, and by others, Mescha-zebe, or Mississippi; M. de la Salle hoped to find the long sought passage to the Red, Vermillion, or South Sea, and acquire the glory of that enterprise. He also hoped to find plenty of beavers wherewith to meet the expense of the journey.

We must not forget the nature of the French Government when contemplating the history of Canada. The King was absolute, not only in public but in private affairs. When he said: "I am the State," he expressed a fact, and not a fiction or a boast. The men and women of the kingdom were subject to the will of one man, even in their personal relations and occupations.

In Canada nothing escaped the supervision of his officers, who were equally absolute, which explains why permission was necessary to engage in any enterprise.

The two parties left Montreal in July, 1669, La Salle having four canoes and fourteen men, the Sulpiciens three canoes and eight men. They reached Ironduquoit Bay, in New York, on the 10th of August, making a portage to the Genesee valley, and some Indian towns near Victor Station and

Boughton Hill, sixteen miles southeasterly from Rochester. The savages told La Salle that the Ohio had its rise three days' journey from "Sonnontouan" or the country of the Senecas.

After a month's travel they would reach the *Hon-ni-as-ant-ke-rons*, and the Chouanons (Shawnees); after passing them and a great fall or chute, there were the Outagamies (Potowatomies), and the country of the *Is-kon-san-gos*, with plenty of deer, buffaloes, thick woods, and an immense population.

The Jesuits had a mission at "Gannegora," the Indian name of a town, and a fort near Boughton Hill, but were absent when La Salle and the Sulpiciens arrived there. The Indians discouraged them from taking the Genesee route to the Ohio, representing that it required six days' journey of twelve leagues or thirty-six miles each. Charlevoix affirms that the Genesee is navigable for canoes sixty leagues or 180 miles, and from thence it is only ten leagues or thirty miles by land to the Alleghany or Ohio river of the Iroquois. Mr. Marshall has shown that this portage was in Alleghany county, New York, from near Belvidere to Olean.

By the united efforts of the Jesuits, the Dutch, and the Senecas, they were persuaded to relinquish this route and hasten back to their canoes, to avoid violence on the part of the savages. They coasted along the south shore of Lake Ontario, passing the Niagara without examination, and reached Burlington Bay on the 22d of September. Denonville in 1687 states that La Salle had houses and people at Niagara in 1668. (Historical Documents, vol. 1., p. 244.) If this is true, La Salle must have been well acquainted with the portage to Lake Erie, around the falls. Why he should have selected the more difficult route by way of Burlington Bay, and a portage of fifteen miles to Grand river, is nowhere explained.

Not far from the head of the bay was the village of Tenouatouan, on the path to Grand river. Here the party met Jolliet and a few Indians, on his return from Mackinaw. He had been sent by the Intendant to find the copper mines of Lake Superior, and appears to have been the first Frenchman to have navigated Lake Erie. He took that route home at the instigation of the Ottawas, and of an Iroquois prisoner he was taking home to his people.

According to Galinee, when they were fifty leagues west of Grand river, this Iroquois became alarmed on account of the Andasterionons, Errionons, Eriqueronons, or Eries of the South shore, with whom the Senecas were at war. They were thus obliged to leave their canoes and make the journey to Tenouatouan by land.

La Salle's plan might have been to cross from Lake Ontario to Grand river, down it to the lake, thence along the north shore of Erie to the mouth of the Maumee river, on the route referred to by him in 1682; up this stream to the portage at Fort Wyne, and down the waters of the Wabash into an unknown world.

In a subsequent letter written from Illinois he speaks of this route, and also in his memorial to Frontenac in 1677, as the best one for traffic between the Great river and Canada, though it does not appear that he ever passed over it. (Western Reserve Historical Society, tract 25.) Jolliet was likewise ambitious of the glory of discovering the Great river, of which the Jesuit missionaries and the Indians gave glowing descriptions.

He seems to have persuaded Galinee and De Casson that this was the better route. La Salle and the Sulpiciens here became alienated, and after attending mass separated on the 30th of September, they to find Lake Erie and the Ottawas of Mackinaw; he to pursue his original design.

He had been for some days sick of a fever, which Galinee attributed to the sight of several rattlesnakes. He declared it to be so late in the season that his voyageurs, not accustomed to such a rigorous climate, would perish in the woods during the winter.

From the hour of this separation we are without explicit information of his journeyings, for a term of nearly three years. During this period the exploration of the Ohio country was effected, and in the opinion of M. Margry, the Mississippi was discovered by him, in advance of Jolliet and Marquette. These wanderings, of which after two hundred years we know very little, show more originality of design, more audacity in execution, and a more pertinacious resolution under difficulties, than his later achievements on the Mississippi.

No one has set up against him a rival claim to the discovery of the Ohio. His heirs, his admirers, and his countrymen should cherish the memory of that discovery as the most wonderful of his exploits. The historical obscurity which has befallen these expeditions is a painful fact, but is in some measure compensated by a glamour of romance, which deepens with the lapse of time.

On seeing his favorite plan of an advance by the north shore of Lake Erie frustrated, he may have determined to brave all dangers and enter the lake by way of Niagara. There are many plans which he may have determined upon, of which we can only form a vague conjecture. He may have turned his canoes along the north shore, and spent the winter in hunting in that country.

Color is given to this surmise by the statement of Nicholas Perrot, that he met La Salle on the Ottawa in 1670, but this is not probable.

Taken in the order of the anonymous relation, he was on a river which ran from east to west, before passing to Onnontague (Onondaga), but there is no water route passable from Lake Ontario to the Ohio, which would pass Onondaga. It is far more probable that the enthusiastic young explorer, entered Niagara river with his Shawnee guide and made the portage to Lake Erie. He could soon find one of the portages to the waters of the Ohio, spoken of by the Senecas. One of them was from Lake Erie near Portland and Westfield, N.Y., of six or seven leagues (eighteen to twenty-one miles), to Chataqua Lake.

Another, of about the same length, answers also to their directions, which was afterward the usual route from Erie to French Creek, at Waterford in Pennsylvania. By either of these routes he might have been on the Alleghany, with his goods and canoes in ten or twelve days, if the weather was good. He would, however, have here been among the Andasterionons, who were probably the Eries or Errierionons, with whom the Senecas were then at war. These Indians had been represented at "Gannegora" as sure to kill the Frenchmen if they went among them.

Gravier has a theory that instead of Onontague or "Gannontague," mentioned in the memoir of the friend of Galinee, we should read Ganestogue or "Ganahogue," the ancient name of the Cuyahoga. It is not improbable that the guide of La Salle knew of this route, along which, ascending the Cuyahoga from Cleveland, would enable the party to reach the waters of the Muskingum, by a portage of seven miles at Akron, and from thence the Ohio, at Marietta. La Salle states that after he reached the Ohio, according to the anonymous account, but one very large river was passed on the north shore, before reaching the falls. If he failed to recognize the Scioto as a very large river, there is only the Great Miami, which meets his description.

He may also have concluded to spend the winter in Ohio, where game was abundant, and beavers numerous, an event to which I have referred in connection with the ax marks. We have no reliable evidence that he was at Montreal between July, 1669, and August, 1672. The records of Villemarie, quoted by Faillon, contain the first solid proof of his presence on the St. Lawrence, after he departed with Galinee and De Casson.

During this period we may be certain he was not idle. It is far from certain how

many men he had, but the anonymous relation affirms, that he was deserted by twenty-three or twenty-four of them after leaving the Falls of the Ohio. Where did he get these additional recruits? In the absence of historical proof, it is reasonable to infer that when he left the Sulpiciens, he moved southwesterly in accordance with his instructions, and did not turn back to Montreal. His honor, his interest, and his ambition all forced him in one direction, toward the country where he was directed to go and to stay, as long as he could subsist.

What the Abbe Faillon states in the third volume of his French Colonies (page 312) confirms this supposition. According to this authority, about four months after La Salle's departure, which would be in November, 1669, a part of his men returned, having refused to follow him. He himself could not have returned at this time without observation, and public discredit.

Such a brief and fruitless effort to reach the Great South Sea could not have escaped the notice of historians. It is not probable that his foreman, Charles Thoulamion, or his surgeon, Roussilier, (*Histoire Colonie Francaise*, vol. 3, p. 290) were among those wanting in courage to follow him. Some soldiers were of the party, furnished by Talon, who would be likely to remain by force of military discipline.

There are many threads of this tangled skein, which can not yet be drawn out. In the first volume of the Margry documents (pages 371-78) may be seen a long recital by a friend of the Abbe Galinee, already referred to, whose name is a subject of conjecture, but presumed by Mr. Parkman to have been the second Prince of Conti, Armand de Bourbon, a friend of La Salle, seventeen or eighteen years of age; purporting to be the substance of conversations with La Salle, which must have taken place as late as 1677, when he was in France. One portion of this paper is styled a "Life of La Salle," a large part of which is occupied by his troubles with the Jesuits. "He (La Salle) left France at twenty-one or twenty-two years of age, in 1665, well instructed in matters in the new world, with the design of attempting new discoveries. After having been some time in Canada he acquired some knowledge of the languages, and traveled northward, where he found nothing worthy of his attention, and resolved to turn southward; and having advanced to a village of savages on the Genesee, where there was a Jesuit, he hoped to find guides, etc." * * * * *

"M. de la Salle continued his route from 'Tenouatous' upon a river which goes from

east to west, and passed to Onondaga (Ontague), then to six or seven leagues below Lake Erie; and having reached longitude 280 deg. or 83 deg., and to latitude 41 deg., found a Sault, which falls toward the west into a low, marshy country, covered with dry trees, of which some are still standing. He was compelled to take the land, and following a height, which led him very far, he found savages who told him that very far from there the same river, which was lost in the low, marshy country, reunited in one bed."

"He continued his way, but as the fatigue was great, twenty-three or twenty-four men, whom he had brought thus far, left him all in one night, regained the river, and saved themselves, some in New Holland and others in New England. He found himself alone at 400 leagues (1,200 miles) from his home, where he failed not to return. Reascending the river, and living by hunting, upon herbs, and upon what the savages gave him, whom he met on the way. After some time he made a second attempt, on the same river, which he left below Lake Erie, making a portage of six or seven leagues (eighteen or twenty-one miles), to embark on this Lake, which he traversed toward the north" into Lakes Huron and Michigan and thence to the Illinois.

Aside from the indefinite phrases of this paper, it is characterized by so many geographical errors that it would possess little value without the support of the following statement of La Salle himself.

LA SALLE TO FRONTENAC, 1677.

"In the year 1667 and following years he (La Salle) made many voyages, at much expense, in which he was the first discoverer of much country south of the great lakes, between them and the great river, Ohio. He followed it to a place where it falls from a great height into marshes, in latitude 37 deg., after having been enlarged by another very large river, which comes from the north, and all these waters according to appearances discharge into the Gulf of Mexico, and here he hopes to find a communication with the sea."

No conjecture respecting La Salle's operations on the Ohio has yet been formed that reconciles these conflicting accounts.

In nothing direct from his pen does La Salle refer to the desertion of his men after leaving the falls of the Ohio. According to the supposed recital of Armand de Bourbon, he had made a long journey from thence by land, the direction of which is not known. He may have been at that time in Kentucky or Tennessee, Indiana, Illinois, or Ohio. If he proceeded westerly he was constantly in-

creasing the distance from Montreal, and whether he was north or south of the Ohio it is scarcely credible that he should find his way back alone in the winter of 1669-70. In the spring of 1681 he made that sad trip from "Crevecoeur" to Niagara, with an Indian and four men, which occupied sixty-five days. It would consume fully as much time to return from the falls of the Ohio. He could not have examined the country near the river, below the falls, or he would not have reported that it is a vast marsh, with intricate channels along which it flowed a great distance, before uniting in a single bed. He could not have traveled far west of the meridian of the falls without hearing of the Mississippi, and making an effort to reach it, for it was only through this river that he then expected to reach the Red Sea on the route to China.

La Salle could not have explored the falls very minutely, and have spoken of them as *very high*, nor of the country below as a *vast marsh*, with numerous and intricate channels. If in his land journey he had gone in a northwesterly direction, he would have struck the Wabash or its main branches in about 125 miles. In a southwesterly direction, the Cumberland and the Tennessee are rivers of equal magnitude, the waters of which he must have encountered in a few days' travel.

Whatever Indians he met would be closely questioned, and if they communicated anything, the Great River must have been the first object of their thoughts. An observation of either of these three rivers by La Salle in the lower part of their course, or even second-hand information respecting them from the savages, must have led a mind so acute as his, sharpened by his purposes and his surroundings, to the conclusion that he was *near the Mississippi*.

Did he reach this conclusion, and find himself baffled by the clamors or the desertion of his men? Did he find means to procure other men and supplies without returning to Montreal? It appears from the "Colonic Francaise," vol. 3, that in the summer of 1671 he had communication with Montreal, where he obtained a credit of 454 livres tournois. Did this enable him to pass from the waters of the Ohio to those of Lake Erie, and undertake a long cruise through the lakes to the Illinois country?

Whatever reply should be made to these queries, it is reasonably evident that when his great work of 1679 was undertaken he did not know that the Ohio is a tributary of the Mississippi, or whether the great unknown river would conduct them to the South Sea. The discoveries of Jolliet in 1673 did not remove these doubts from the

minds of the Governor-General, or the geographers of that period.

La Salle, as late as 1682, after having been at the mouth of the Mississippi, was inclined to the opinion that the Ohio ran into a great (but imaginary) river, called Chucua, east of the Mississippi, discharging into the Gulf or the Atlantic in Florida. The French had not followed the Ohio from the falls to its junction with the Wabash. On a map made in 1692, ten years later, the Wabash is equivalent to the lower Ohio, formed by the Miami and the upper Ohio, the Wabash of our maps being omitted.

The main facts which residents of the Ohio valley are most curious to know concerning La Salle's operations here, are yet wanting. We have made diligent search for them, and are as yet unable to say, precisely, how much time he spent on the waters of the Ohio and Lake Erie, prior to 1673; what trading posts he established, if any; what streams he navigated, or with what tribes he became acquainted. The instructions to Governor-General Duquesne in 1752, above referred to; claim that the French had occupied this country ever since it was discovered by La Salle. Governor Burnet, of the colony of New York in 1721, states that, three years before, the French had no establishments on Lake Erie.

We may infer that La Salle was busily occupied during the years 1670 and 1671, on the waters of the Ohio and Lake Erie, collecting furs, for he had no other means of support. The credit he obtained at Villenarie in 1671 was payable in furs. If this map should be discovered in some neglected cabinet in France, we should no doubt find here a solution of many historical difficulties that now perplex us. It was the custom at that time to make very full memoranda on maps, amounting to a condensed report of the author's travels. If this map exists, Europe does not contain a paper of more value to us.

Mr. Shea, whose labor on the history of French occupation, have been wonderfully persistent and minute; is of the opinion that we may presume that unauthorized voyageurs, trappers, traders, and coureurs de bois, both French and English,

were among the Indians in advance of the explorers.

The Dutch on the Hudson, and after 1664 the English, were on good terms with the Iroquois, who carried their wars to Lake Superior and the Mississippi. We have no records of the movements of these half-savage traders, except in the case of Etienne Brule, and that is of little value.

La Salle was probably on the waters of the Ohio when Governor Woods, of the Colony of Virginia, sent a party to find that river in September, 1671. This party reached the falls of the Kanawha on the 17th of that month, where they found rude letters cut upon standing trees. They took possession of the country in the name of Charles II., of England, and proceeded no farther. (Botts' Journal New York Colonial Documents, vol. 3, p. 194.) William Penn's colony was not then organized. In 1685 or 1686 some English traders penetrated as far as Mackinaw, by way of Lake Erie. They were probably from New York, and having made their purchases of the Ottawas, returned under the protection of the Hurons or Wyandots, of the west end of Lake Erie.

If the Virginians were engaged in the Indian trade at this early period, their route would be up the Potomac to the heads of the Youghagheny, and from the forks of the Ohio at Pittsburg to Lake Erie, by the Allegheny river and French creek, or by way of the Beaver, Mahoning, and the Cuyahoga rivers. These Arabs of the forest, would carry axes and hatchets having a steel bit, whether Dutch, French or English; and thus may have done the hacking upon our trees which I have described. None of these people would be likely to leave other records of their presence, in a country claimed by their different Governments, on which one party or the other were trespassers.

I am aware that this presentation of the most interesting period in the history of Ohio is desultory and incomplete. If there had been a reasonable prospect of more facts, it would have been delayed, but it is doubtful if we may expect much more light on the subject of the discovery of the Ohio valley.

CLEVELAND, O., June 18, 1877.

Western Reserve and Northern Ohio

HISTORICAL SOCIETY.

AUTOGRAPH LETTERS.

TRACT THIRTY-NINE.

THOMAS WORTHINGTON TO GOVERNOR ST. CLAIR.

CHILLICOTHE, Feb. 26, 1799.

To His Excellency Governor St. Clair, Cincinnati:

SIR: You will recollect that when I had the pleasure of seeing you in Cincinnati I took the liberty of stating it to you as my opinion that Major James Dunlap had not resigned his commission as a major in the militia of Ross county. I have since my return consulted that gentleman and found I was correct in my opinion, as will more fully appear by his letter which will accompany this to you. I think it my duty to prove to you that my opinion was right and not given with intent to injure Colonel Finley, who can best account for the mistake. I am sorry that it has happened, as it has tended to hurt the feelings of Major Dunlap, who is with us accounted a worthy citizen. As Colonel Finley appears willing to dispose of Major Dunlap, should you think proper to make the arrangements you mentioned in the militia of Ross county, I shall be pleased to see him continued in that position of the militia assigned to my charge. I hope the gout did not continue long or severe. Accept my best wishes for your health. Will you be so good as to excuse the postage of this letter not being paid, as there is no postoffice in Chillicothe; there is no person authorized to receive the postage, otherwise it would have been paid. I will, if I live to see you, take an opportunity of refunding.

I have the honor to be, with much respect, sir,

Your obt^d serv^t,

T. WORTHINGTON.

PRESIDENT JOHN ADAMS TO LEGISLATURE NORTHWESTERN TERRITORY.

To the Legislative Council and House of Representatives of the territory northwest of the river Ohio:

GENTLEMEN: A kind address has been transmitted to me, at your request, by Governor St. Clair, subscribed by Edward Tiffin, Speaker of the House of Representatives, and H. Vanderburgh, President of the Council, the more agreeable to me as it appears to have been unanimous. I pray you to accept of my sincere thanks, for this pledge of your affection and respect. The confidence and approbation of so remote a portion of the nation, as it may be supposed to be impartial, is precious to me. Whatever may have been my prospects in private life, whatever delight I may have taken in its pursuits and whatever inclination I may have always had for its tranquility, I have not declined the invitations of the public to assist in their councils. If any efforts of mine, in concert with others of brighter talents and fairer fame, have contributed in any degree to your enjoyment of the rich country you now inhabit, this consideration alone ought to be esteemed by me as a sufficient reward for the services of a whole life.

Your sincere attachment to the Constitution and Government, and your determination to afford every possible support to both, do you honor, while your prayers for my life and health deserve my best thanks and sincere benedictions to yourselves and your posterity.

JOHN ADAMS.

PHILADELPHIA, Jan. 18, 1800.

PETITION OF THE LAND COMPANY, 1801.

At a meeting of the Connecticut Land Company held by adjournment at Hartford on the first Tuesday of April, 1801.

Voted that the Directors be requested to take measures to procure an act of the Legislature of the Northwest Territory at their next session, validating the records of the agreements, votes, and proceedings of the Connecticut Land Company. Also to procure an act authorizing the Judges and assisting Justices of the Supreme and Superior Courts and Courts of Common Pleas in either of the United States, to take acknowledgment of deeds and conveyances of lands in the County of Trumbull, and also to procure an act making valid so far as respects all matter of form, such as acknowledgments, witnessing, and the like, of all deeds given for land in the County of Trumbull, which have been executed and acknowledged according to the existing laws of any one of the United States, in the same manner as though said deeds had been executed according to the laws of the Northwest Territory.

A true copy. EPHRAIM ROOT,
Clerk of the Connecticut Land Company.

GOVERNOR EDWARD TIFFIN TO —, 1805.

CHILLICOTHE, Sept. 23, 1805.

DEAR SIR: Colonel Worthington has returned. He called at Washington, but the President was absent from the city, therefore he did not see him. He had never heard that Judge Sprigg did not accept his appointment in Michigan Territory until I informed him thereof. But it appears George Matthews, of Georgia, is appointed to fill the office. I do not know how to credit the news, but I have seen it so published in several papers, two of which are now by me, and I cut out the notification and inclose them to you. This is all the information I have of it, and you can see for yourself, and afterwards, perhaps, you, like me, will not know whether to believe it or no. If so it has been quick work. I am, dear sir, with great respect, yours, etc., etc.

EDWARD TIFFIN.

GOVERNOR EDWARD TIFFIN TO GEORGE TOD—1806.

CHILLICOTHE, May 13, 1806.

DEAR SIR: Herewith enclosed you will receive a commission constituting you a Judge of the Supreme Court of this State, in the room of William Sprigg, Esquire, resigned.

Perhaps it may be satisfactory to you to explain some of the reasons why I did not answer a note I received from you prior to your leaving this town, in the winter, rela-

tive to this subject. Mr. Sprigg had not then resigned (nor did he until last month), and feeling perhaps too sensibly the weight of that responsibility which falls on me in making important appointments, I wished time for mature deliberation, for as the Legislature has a controlling power over Government appointments, it is a great desideratum that the Governor, the Legislature, and the people should all equally approve an appointment which so greatly concerns all as a Supreme Judge. I therefore thought as Judge Pease had been appointed by the Legislature to the presidency of the Upper Circuit, and had given (so far as I can learn) general satisfaction, that I would tender him this appointment, and give you the presidency in his room, but for certain reasons satisfactory to me he thought proper to decline accepting it. I thought candor required me to say thus far on this subject to you, as I wish, while I act for the State, not only to be able to justify to my own mind my official conduct, but also to satisfy every person as far as prudence will justify my reasons for so acting. In hopes this will find you well, I remain, with great respect, dear sir, Your obedient servant,

GEORGE TOD, Esq. EDWARD TIFFIN.

APPREHENSIONS OF THE INDIANS, IN OHIO, 1807—BENJAMIN WHITEMAN TO GENERAL WILLIAM C. SCHENCK.

GREEN COUNTY, Aug. ye 27th, 1807.

SIR: I have seen the copy of a letter written by Wells the Indian agent, notifying the people of the frontier settlements of the arrival of a body of Indians at Forts Wayne and Greenville, amounting to upwards of 700, and advising the inhabitants to watch their movements. Our situation is really critical and perhaps not less alarming; within a few days' march of that number of British adherents, without arms or fortifications for the protection of our families. We have applied to the executive interference but without effect. Can't we by a joint application endeavor to procure a supply from the arsenal? Suppose you write to General Findley to make the proposal, and see if as many as 1,500 stand could be procured for the space of two or three months on giving proper security for their safe keeping and delivery at the time specified. Some of the tall fellows of Champain are now with me and say their quarter must be defended and that I am the first spring of their motion. What is to be done? Are we to raise men sufficient and say to the Indians disperse and enforce the order, or shall we be still and wait the event, however fatal it may be?

Pray give the affair your serious contemplation, and if you think of doing anything

in the business send an express immediately to me, and I will endeavor to co-operate with you in whatever measures you may adopt. The letter referred to was dated at Fort Wayne, the 22d of this inst., and appears to have been written in haste.

From your friend,

BENJAMIN WHITEMAN.

To GENERAL SCHENCK.

THOMAS WORTHINGTON IN CONGRESS TO JUDGE GEORGE TOD—1812.

WASHINGTON, March 15th, 1812.

Your letter of the 29th of January has remained unanswered until I could inform you of the result of your application. You will have seen before this reaches you that only two field officers were assigned to the State of Ohio, a Lieutenant Colonel and a Major. The Legislature had very generally recommended six or seven for field appointments, three of whom were acting Brigadiers in the militia. Under these circumstances you will see the unpleasant situation of the delegation in Congress—General Miller, of Steubenville, has been appointed the Lieutenant Colonel, and you have been appointed the Major. Knowing as you do the state of party in Ohio, and that unfortunately it has kept from that social intercourse so essential to happiness, many among us and perhaps you and me particularly. I have on this occasion endeavored to give you the best evidence of my personal good wishes.

Inasmuch as our spheres of action in the future will be very different, you will be employed in the noise and bustle of a camp, whilst I probably may be engaged in civil or private life, and as we may never meet again on this side the grave, I beg you to be assured that you have had and will continue to carry with you my best wishes. I make you this tender the more readily on this occasion because I am persuaded you have been altogether misinformed as to my personal feelings toward you, and have only to add that under the circumstances we were placed it was not in my power to get you a higher appointment. Yours respectfully,

T. WORTHINGTON.

P. S. War, in my opinion, is inevitable.

HON. WM. CREIGHTON, M. C., TO MAJOR TOD.

WASHINGTON CITY, July 15, 1813.

DEAR SIR: Yours of 20th ultimo has been duly received. We have had two or three expresses during this day, advising that the enemy are ascending the Potomac in considerable force; they were last evening about seventy miles below this city. The military of the district was put in motion this morning. I understand a consider-

able force is thrown into Fort Washington, which is fourteen miles below this city. If the enemy should approach us, we must, at the hazard of our nappers, maintain the Capitol, and support and protect the flag that waves over this beautiful edifice. Although some alarm is excited, I have no idea they will venture this far. A few days since a resolution was laid on our table proposing the appointment of a committee to inquire into the causes of the failure of our arms on the Northern and Northwestern frontiers. I don't expect that the resolution will be called up this session. I don't think it reasonable at this time, but as soon as the campaign is over should be glad to have the enquiry. Our military affairs have been most miserably managed on the Niagara frontier; it has produced great murmuring and dissatisfaction among the people.

We are still laboring on the tax bills. If not routed by the enemy, we hope to close our session about the 1st of August. The sentiment is general that our Russian Emperor will make a treaty, and that we shall have peace. A great deal I should suppose would depend on the state of affairs in Europe at the time. God grant a speedy peace, if it can be obtained on honorable terms. We expect shortly to hear of your embarking for the Canada shore. God send you a safe deliverance. I hope it may be the proud lot of the northwestern army to turn the tide of war. Success and victory attend your steps. Nothing has or will be done this session but adopt a system of revenue. We have no additional news here but what you will receive through the papers.

Your friend,

W. CREIGHTON, Jr.

MAJOR GEORGE TOD, Northwestern Army.

ABRAHAM LINCOLN TO JAMES A. BRIGGS—1859.

The discourse which followed led to his nomination in 1860.

M'CORMACK HOUSE, DANVILLE,
ILLINOIS, Nov. 13, 1859.

JAMES A. BRIGGS, Esq., New York:

DEAR SIR: Yours of the 1st, closing with my proposition for compromise, was duly received. I shall be on hand, and on due time will notify you of the exact day. I believe, after all, I will make a political speech of it. You have no objection?

I would like to know in advance whether I am also to speak or lecture in New York.

Very, very glad your election went right.

Yours truly, A. LINCOLN.

P. S.—I am here at court, but my address is still at Springfield, Illinois. A. L.

Patriot War of 1838.

COLONEL S. VON SCHULTZ TO GENERAL L. V.
BIERCE, AKRON, OHIO.

SALINA, N. Y., Sept. 28, 1838.

To Major-General Bierce, Commander-in-Chief:

DEAR SIR: I have the honor to acknowledge the receipt of your letter dated the 17th of September, which this moment was handed to me, in relation to the organization of my forces and their movements. It is with feelings of gratification and pride I accept the honorable part you have entrusted to me, and I hasten with the utmost dispatch to fulfill my promises.

As the nature of the troops I organize requires officers of a particular description, I confidently trust you will have the goodness to permit me to appoint my officers and staff and report them to you for commissions.

The headquarters of my countrymen being at Philadelphia, I hasten to them through night and day, and will immediately report to you from that place. Your orders regarding the movement of my companies will be punctually obeyed. I hope you will rely with confidence on my discretion in all that regards the secrecy and security of our noble enterprise.

Permit me, General, to lay before you a plan of attack for the opening of the campaign, and be assured at the same time that the reason why I do it does not originate in a supercilious pride, but that I consider it an imperious duty on my part, thereby to show myself worthy the command where-with I have been entrusted, and add the experience which during twelve years active service, I may have acquired in the art of war and military combinations to the talents with which you have surrounded yourself; and further, that if the service of the detached regiment is a difficult and bloody one, I will regard it as a particular favor to have my regiment ordered to execute it. The plan is the following:

Twenty-four hours before you open hostilities with the main army from Detroit or its neighborhood, a regiment will be detached and sent round by water to Waterloo. There it lands and proceeds immediately to Fort Erie, which is stormed and carried; a small garrison and the wounded are left there. The regiment will proceed the same night, without repose, toward Queenston (twenty-four miles), where it arrives the following day; attacks, storms, and carries the fortifications and the town. Leaves a garrison and proceeds to Fort George;

storms and carries it; leaves a garrison, wheels to the left and occupies Port Dalhousie; organizes that town for defense by throwing up two strong redouts, and abides there the movements of your main army, which will have proceeded in the following manner:

Twenty-four hours after the departure of the detachment the army is put in motion, storms and carries Fort Malden; leaves a garrison and proceeds in ordinary marches on the London road leading toward Toronto. Arrived at Ancaster, an express is dispatched to the commander of the detachment at Dalhousie (who will send scouts and reconnoitering parties so far), informing him of the very hour you intend to make the attack on Toronto. The commander of the detachment will in the meantime have arranged means for crossing the lake, and shall at the fixed hour land his forces at Toronto, thereby operating on the flank of the enemy, and force him to divide his troops. I have no doubt the place will thus be carried. The benefits resulting from this plan are the following: Fort Erie, situated opposite and near Buffalo, enables the patriots there to send their supplies of arms, etc., to a fortified place, and volontaires can there be taken up, drilled and forwarded; the same it is with other fortified places. In the meantime the enemy at Toronto dares not venture to advance against the main army because he would be taken in the rear by the detachment. Consequently you can advance undisturbed with your whole force, incorporating all the patriot forces on your way onward. Your troops will be enlivened and confident of success by the information of the victories of the detachment, thus raising a moral impulse among the soldiers. The patriots will more readily hasten round your standard, knowing that you have places where, in a movement, they can be in security and near the frontiers; finally in case of any reverse the army can rally round the fortresses, which thus constitute a sure basis of operation and contain excellent depots. Free communications East and West with the United States are also opened.

It is with great anxiety I await your answer, which I beg you to send on to Philadelphia, Penna.

I have the honor to be, General, very respectfully, yours, ob't servant,

SCHOLTEWSKY VON SCHULTZ, Colonel.

NOTE.—During the following winter Von Schoultz and his command made the famous attack on Prescott, Upper Canada, in which he at first succeeded so far as to entrench himself at Windmill Point, but was overcome, captured, and executed by hanging.

Mexican War—1846-7.

GENERAL NATHANIEL LYON TO GEORGE A. TISDALE, CLEVELAND, O.

PUEBLA, Mex., June 23, 1847.

DEAR TISDALE: Your letter of the 21st of April was received at this place a few days ago, and for this accept my many thanks, as also for your kind attentions in sending me the illustrated life of General Scott and the magazines, all of which were received by the same mail. This life of the General, like that written about a year before by Mansfield, was no doubt got up for political effect, and Democrat as I am and must be from principle, I cannot but sympathize with the friends of General Scott for the indignity offered him by the President and the Representatives of the people in endeavoring to supercede both him and General Taylor in the command of the Army by the appointment of a Lieutenant-General. The sinister motives which actuated the patronage evince a frenzy that is ready to sacrifice National interests to subserve party purposes, a course, as shown by John Tyler, which is sure of defeating its own end, and which I fear is doing much to injure the Democratic party. The conduct of General Scott in this campaign has shown him eminently qualified for the important position he holds, and however I may have joined in the ridicule to which his political aspirations exposed him, I will not withhold a just tribute of respect and admiration for a character identified with the most brilliant achievements in the history of our country.

You will see by the date of this that I am 110 miles nearer "the Halls" than when I last wrote you from Jalapa. Having my history, therefore, up to that time I proceed to bring it up to present date. We were detained at Jalapa a long time from the necessity of procuring a large store of supplies to proceed interior. General Worth in the meantime had advanced with the division under his command as far as this place without opposition, but till our arrival was seriously concerned for his safety, being apprehensive (for such was rife rumor) that a large force was coming out from the capital to attack him, but these unfounded rumors changed to others equally so—that a large force had come out from the capital and established themselves upon three different points upon the road with a view successfully to oppose our advance—but all rumors have now given way, for the fact is pretty well ascertained that vigorous efforts are making to defend the capital, and for this purpose works are erecting just outside the city.

We arrived here on the 29th ult., after seven days march from Jalapa, and had

we proceeded directly to Mexico, I doubt not we should have taken possession of the city without resistance. But the old regiments of volunteers having been discharged, left our force so small that our General thought, if not running the hazard of a defeat, it would at least induce a more vigorous resistance by advancing with a small than a large force. We are therefore waiting for General Cadwallader, who is now daily expected with 3,000 or 4,000 men, and on his arrival we shall proceed to the "Halls of Montezuma." We had expected to revel there on the 4th of July, but as we shall not probably start before the 1st we cannot get there by the 4th. In my last letter I believe I described the natural advantages of Jalapa, which make it the paradise of earth, and also its beautiful and graceful women and kind, gentlemanly men; but in leaving there please follow me along an ascending and winding road through the mountains to Perote, a distance of thirty miles. The scenery along this road is of every variety, but from the towering heights above to the precipitous cliffs and deep ravines below much is huge, wild, and majestic. Half way between Jalapa and Perote is another pass more formidable than Cerro Gordo, where extensive preparations had been made for resisting our advance, but these works being incomplete, our rapid advance took them by surprise, and they abandoned them without a struggle, leaving seven cannon. The famed castle of Perote was also left without resistance, and about 100 cannon were taken and a large quantity of other stores. The country between Perote and here is a level plain of immense extent, reaching in many directions beyond the sight, but for the most part girted in the distance by barren mountains of basaltic rock. Many parts of this plain are fertile and under high cultivation.

Along the road are several towns, respectable in size and appearance, and also to the right and left are to be seen pretty country seats and villages. This, at first, seems a city of churches, there being about 100 of them, and all large, massive structures, laboriously wrought on the exterior into towers, turrets, columns, pillars, etc., ornamented with numerous images and statues carved in wood or made of plaster. The interior of these churches is of beautiful structure. It were an endless job to describe the number of paintings, images, statues, devices, organs and other musical instruments, rich drapery and other ornaments that adorned these places. To most of these churches large convents are attached, occupied by numerous nuns. The large cathedral on the main plaza is a most stupendous edifice. A person is lost in

wonder in contemplating its vast dimensions and immense wealth. This is a large, well laid out and well built city. The streets are at right angles and wide, and originally well paved. The people, about 80,000 in number, are made up of every variety, but mostly of the low mixture I have before described. There are many poor, and houses of charity for them. We expect to leave here about the 1st of next month, as General Cadwallader will probably join us in a few days with not less than 3,000 men, when, I presume, we shall advance.

You will naturally ask whether there are any indications of peace. If indeed there were, you might expect they would be dissipated long ere this would reach you. The efforts of Congress last winter to confiscate the property of the church to support the war has exasperated the priests against the party that would carry on the war at their expense. This party with their adherents, it is expected, will exert their powerful influence in favor of peace. Have the goodness to remember me kindly to your wife and mother, and other good people of your place, and for yourself, allow me to renew my well-wishes and expressions of esteem.

N. LYON.

GEORGE A. TISDALE.

Correspondence of General Pike, 1801-1811.

GENERAL ZEBULON MONTGOMERY PIKE.

The father of General Pike was Captain Zebulon Pike, of the Revolutionary army, from New Jersey. He re-entered the military service under General St. Clair, and was present at the terrible defeat of the United States troops by the Indians in Darke county, O., November, 1791. He was promoted to be Major in 1800, and Lieutenant Colonel by brevet, July 10th, 1812. On the 27th of July, 1834, he died at Lawrenceburgh, Ind. Zebulon Montgomery Pike was born at Trenton, New Jersey, January, 1779. He entered the army as a cadet in the Second Infantry, November, 1799. For those times he had received a fair education, especially in mathematics. He was soon promoted to be Ensign, and Second Lieutenant. In the winter of 1805-6 he was sent by the Government to explore the Upper Mississippi, with a squad of soldiers. He reached Sandy Lake on sledges, and returned before the opening of navigation.

In August, 1806, he was promoted to a captaincy, and sent on a tour of geographical observations up the Red River of Louisiana. Having passed the boundary of the United States, he was captured by the Spaniards and taken to Santa Fe. His reports of

these explorations exhibit great perseverance, intelligence, and courage. In 1808 premonitions of war with Great Britain gave rise to an increase of the army. Captain Pike was commissioned a Major in the Sixth Infantry, and in 1810 Lieutenant-Colonel in the Fourth. When the army was again increased he was made Colonel of the Fifteenth Infantry, July, 1812, and on the 12th of March, 1813, a Brigadier-General, and Adjutant and Inspector-General.

In this capacity he had command of the attack upon Little York, now Toronto, in Canada. "Landing under a heavy fire he charged the enemy and put them to flight, carried one battery by assault, and was moving on the main works when the magazine exploded, by which he was mortally wounded, and died on the field, April 27th, 1813."

On land he gave promise of what Commodore Perry was on water. Most of the fourteen (14) letters furnished us by Mr. Gage relate to domestic and not historical affairs. They show him to have been sensitive, impetuous, and affectionate. His wife was a daughter of General William H. Harrison, and has been granted a special pension as his widow.

General Wade Hampton, referred to in the letter of December 20th, 1811, had distinguished himself in the partisan warfare with Sumpter and Marion. In 1808 he was commissioned a colonel, and in 1809 a Brigadier General. He was conspicuous as the owner of 3,000 slaves, a man of great wealth and pretensions. Soon after the date of this letter he was superceded in the district of New Orleans by General Wilkinson on account of personal difficulties with the officers under his command.

CINCINNATI, Oct. 12, 1801.

Major Zebulon Pike, Boone county, State of Kentucky:

SIR: Yours of this date, by James, I have the honor to acknowledge the receipt of, and attention to the first part shall immediately be paid—the concern you express for fear I should subject myself to censure below. I feel myself indebted to the sentiments from which they flow, but at the same time feel so conscious of the propriety of my public conduct since at this place that I am equally willing it should become the object of public investigation and private scrutiny; for as certain as the meridian sun dispels the morning vapor so would the clearness of my official character dispel the dark insinuations pointed against me either by open enemies or in sidious friends.

With respect to my conduct as connected with Captain Brown it may possibly be a

little too independent when my private situation is taken into view, but although I have, through my folly and extravagance in youth, forfeited, in a degree, my independence of situation, still nothing can justify an unconditional submission to the will of any man in existence; and should I be confined to the walls of a prison, still should my soul be free, and scorn to ask for assistance of any man who should grant it under the idea that I thereby forfeited either my right to think, speak or act, agreeable to my own will and the laws of my country. At the same time I will willingly receive the advice of those either my superiors in rank, age, or connected with me by consanguinity, sensible that youth is subject to errors and wants the cool and earnest judgment of age to correct their over heated imaginations, but whilst I have breath, I will never be the slave of any man whilst he thinks that his authority is derived from pecuniary motives; but from gratitude he might expect great sacrifices.

With wishes for the restoration of the health of the family and continuation of that happiness, with every other indulgence heaven may please to grant, is the wish of your son.
Z. M. PIKE.

Major Pike.

N. B.—Colonel Strong* deceased on the 19th of August, after an illness of forty hours. Mrs. Strong being on her way up, I expect to take her boat at once to descend with.
Z. M. PIKE.

* NOTE.—David Strong entered the army of the United States as a captain in 1789, from Connecticut, Major in Second sub-Legion, 1791, and Lieutenant Colonel commanding in 1793, under General Wayne; in 1796, Lieutenant Colonel in the Second Infantry. Died as above stated at Wilkinsonville, Mississippi Territory, August 9th, 1801.

VINCENNES, Feb. 28, 1802.

Major Zebulon Pike, Cincinnati, Northwest Territory:

DEAR SIR: It is now late. I am induced to think that you will pardon the errors of a nocturnal letter, nor yet ascribe it to vanity when I say that I can scarce obtain time between the duties of my stations and the company and amusements of the Governor's and other families of this place (as the military are all the vogue) to write one in daylight. But to my object. You will perceive by the late bill (which I have no doubt ere this is passed into a law) that agreeable to all human probabilities you will be disbanded, and notwithstanding your motion made by General Smith, and the still more noble one of the Honorable Mr. Griswold, to provide for those who had grown "grey in the service of the

country," you are to be dismissed with the noble and adequate provision of three whole months' pay and subsistence. Wonderful indeed in the present rage for economy. That's the end of a man's views who has bled and spent his youth in the service of an ungrateful country. Fine encouragement for sons to tread in the footsteps of their fathers. And unless I can obtain one of the profitable and honorable staff appointments contemplated in the bill, I have quitting service strongly in view; but my plan must be matured and foundation sure. Your land at the mouth of the Miami is in the Indiana Territory, and that part will be formed into a county, under that Government, as soon as it becomes sufficiently populous. I believe that Governor Harrison feels disposed to serve you, but how you can brook to ask, or what he has to give, is to me equally unknown. However, my dear sir, believe that I feel the ties of duty and inclination much closer drawn from the idea of your embarrassment, and without unmeaning professions, would sacrifice much of my future prospects and inclinations if I could by that smooth the decline of life of my parents. Request mama to write me. Where are James, Maria, and George? When I think of them my duty seems to impel me the more forcibly to quit the army. As for Clara, at the risque of everything, she shall accompany me the next voyage.

My address is, W. Ville, to the care of Captain Meninger.

Heaven's favour attend you. Adieu.

Z. M. PIKE.

CANTONM'T, WASHINGTON, M. TY., }
10 July, 1810. }

MY DEAR SIR: As I keep no copy of the letters I write you, I do not recollect the purport of my last, yet conceive I have some cause to complain of your silence, and Maria must have entirely lost the art of writing, or have forgot our consanguinity. Neither have I heard from George since the decease of our dear mother. I have written to the Secretary of War on the subject of getting him appointed an Ensign in the Regiment to which I am attached, which is now the 4th or Massachusetts Regt. commanded by Col. Boyd, who has served in the East, where he was at the head of a corps of 10,000 Cavalry and his having made an independent fortune of £20,000 per annum, certainly can be no objection to him. Whether I shall join or remain here is uncertain, but I could not be more proudly situated in a military point of view than I am. If we have war it will be with France, which must be according to

their own forms "à la distance"; however, it will have the effect to unite us and cause us to rally round our Government. The Floridas are in a state of commotion and I believe will follow the example set them by the Caraccas. We cannot remain uninterested spectators of what is acting in our vicinity. In all probabilities we shall have war; if so, I shall remain a soldier all my life, for five or six years more would render me unfit for any other duty or profession; but I had recently become disposed to quit, yet all my friends seem now to think I should remain, but the idea of always being poor is what I detest, more especially when I see so many worthless scoundrels men of fortune. Clara would be extremely happy if Maria would keep up the correspondence. James has been able to keep himself independent and that is all. I think it would lead to both your happiness if he was at home with you. My father invited him to return, leaving it to his option. His address is still New Orleans.

My old friend Governor Claiborne has sent me word he is coming after me in a few moments. I will, therefore, seal up my letter after desiring you to believe me to be affectionately your son,
Z. M. PIKE.

Major Zebulon Pike, First Regiment Infantry, Lawrenceburgh, Indiana Territory:

BATON ROUGE, 20 Dec. 1811.

MY DEAR FATHER: I have received a letter from James under date of the 24th of November, speaking principally relating to George, whom I presume is with you ere this. The former was very apprehensive I would suffer George to pass the wilderness on foot. I had no idea of this, although at the time of his departure * * * *

General Hampton arrived here on the 16th inst. I waited on him at the head of my officers. He honored me by not offering his hand, and endeavoring to insult me by neglect and inattention. He ordered a

review at 4 o'clock, which took place. As the troops were passing he observed he would be glad to have a sample of firing from the battery of artillery. I demanded his meaning. He replied a salute must be fired. I demanded the number of guns. "Twelve," was his answer. I halted the column and ordered them fired, as I had not saluted him before—a regulation of the War Department prohibiting it. After the review we maneuvered in his presence with powder. He then viewed my works and garrison, and after all was pleased to observe: "Sir, I have found your troops in military order; your manœuvres were in a style far superior to anything I could have expected in our army, and the improvements you have made in barracks and quarters for the comfort and health of your men meet my highest approbation." We then parted and I sent my Adjutant with the report of the troops and have never been near him since. He is about to make two regiments out of the parts of four which are in this country, viz.: the Third, Fifth, Sixth, and Seventh. The Third, being raised in the Carolinas and Georgia, and the Seventh in Tennessee, Kentucky, and Ohio, it is believed will be the ones completed. Colonel Simmons, of the Sixth, will be arrested. Colonel Constant, of the Fifth, Lieutenant Colonels Purdy, and myself will be colonels if Constant should retire. Purdy will have one of the corps and I the other; but it is generally believed he will order me to join my corps at Vincennes, by way of punishment. Cushing is still under arrest and no arrangements making for his trial. Do. is Sparks. Letters say General Wilkinson will be out all next month. I say, God-send. General H. and myself never can be friends, unless he will give me the explanation due from one gentleman to another. Clara joins me in love to Maria and James, and compliments to W.

Your son,
Z. M. PIKE.

Major Pike.

THE IROQUOIS IN OHIO.

Read Before the Society, December 28th, 1868,

By C. C. BALDWIN.

In 1608 an Indian from the Ottawas visited Quebec and urged Samuel de Champlain, the "Father of New France," to join an Indian war party against the Iroquois. In May, 1609, Champlain set out with his little band. On the west shore of the lake, still called Champlain, they met the enemy. The allies opened their ranks for their mail-clad, heaven-armed champion, who advanced to the front. At the report of his arquebuse an Indian fell, and after a very few discharges, the astonished Iroquois fled from the supernatural enemy, whose thunder and lightning struck them dead before they could reach him.

Such was the first introduction of the Iroquois to civilization. This act ruled the history of Northern Ohio for a century and a half. The Iroquois forgot not the event; for until New France became a British colony they kept up the old hatred, generally the old war; and they held the entrance to our country. "To this Indian League," says Morgan, "France must chiefly ascribe the final overthrow of her magnificent schemes of colonization in the northern part of America."

The Iroquois have been called the "Romans of the New World." Colden, in his History, relates many things in their manners and policy wherein he finds a resemblance to the classic ancients, and a superiority to our own ancestors, the Britons.

The origin of the nation as such is concealed by time. When first known to the whites they occupied the country stretching from east to west through Central New York and along Lake Ontario. It was a confederacy composed of five tribes whose union was strength. Of kindred tongue were the Andastes of Pennsylvania, Eries of Ohio, Hurons and Neutrals (so-called) of the Peninsula, north of Lake Erie, reaching to Lake Huron. Their language and character were so different from the surrounding nations that some have imagined them of altogether different origin. The Indian languages have more mobility than any other, and, according to Professor Whitney (*Science of Language*), text books prepared by missionaries have become almost unintelligible in three or four generations. Here lay the five nations, like an island, in a great sea of Algonquins; their situation well depicted in the third volume of Bancroft's history (page 241), showing that theirs must have been an interesting history. Had they driven away the "Mound Builders" from Western New York, and their more thickly settled seats in Ohio? Schoolcraft repeats the tradition that they came from the St. Lawrence to New York, that the confederation had taken place, and that its "chief repaired to the South to visit a ruler of great fame and authority who resided at a great town in a lodge of gold;" that this great ruler built many forts, and almost penetrated to the banks of Lake Erie; that the confederates resisted, and after a war of 100 years the towns and forts were conquered and were heaps of ruins. The Delawares had a similar tradition, different in detail, associating the Iroquois with themselves in the destruction of a race, possibly the Mound Builders.

It is curious that it is a part of the tradition related by Schoolcraft, that the Iroquois excelled in arts of savage warfare; that after the driving out of the Nation of the "Lodge of Gold" from their town and forts, there was a large increase of wild beasts, as there must have been after the destruction of the Mound Builders; who were so numerous that they must have lived by agriculture. Were

the fortifications of Northern Ohio and New York those of this tradition?

Schoolcraft states that after this the Huron-Iroquois family fell asunder, and still afterward the Iroquois confederacy was formed. Mr. Morgan, in his careful and able book, "League of the Iroquois," concludes that the course of the Huron-Iroquois was from the St. Lawrence to New York; that they were separated into families, and that the league of the Iroquois was afterward formed, he supposes, about the year 1500, though he says tradition dates it earlier. Governor Dongan told the Lords of Trade that, for aught he knew, they had lived in New York hundreds of years. At Lancaster, at the treaty of 1744, Canassatego said to "Brother the Governor of Maryland:" "When you mentioned the affair of the land yesterday, you went back to old times, and told us you had been in possession of the province of Maryland above 100 years: but what is one 100 years in comparison of the length of time since our claim began—since we came out of the ground? For we must tell you that long before 100 years our ancestors came out of the very ground, and our children have remained here ever since."

The Iroquois made their name feared far and wide. They collected tribute of many of the Indians of New England, and the cry of "A Mohawk, a Mohawk," drove all the Indians to places of concealment or refuge. Of their conquest of cognate tribes, Francis Parkman gives a wonderfully interesting account in his "Jesuits in North America." They conquered the Hurons and broke up the French missions, though the French assisted in their defense. They even defeated the Hurons in sight of Quebec. The first mention in history of the country south of Lake Erie occurs in the relation of this war. In 1615, Etienne Brulé, the interpreter of Champlain, is supposed to have visited the Eries for reinforcements to assist the Hurons. The Iroquois destroyed the Neutrals, who occupied the territory north of Lake Erie, extending to Niagara river, around Lake Erie,

and possibly some little distance along its southern shore. In 1654 they had totally conquered the Hurons, who, driven from place to place, separated, part of them settling in Western Ohio, and remaining until a late day, from Sandusky westward, under the name of Wyandots. The Iroquois then made peace with the French and few remaining Hurons, and announced at Quebec that they were going to war with the Eries. On the 10th day of August, 1654, Father Simon Le Moine gave them hatchets for this service, and also by his nineteenth present, "wiped away the tears of all their young warriors for the death of their great chief Annencraos, a short time prisoner with the Cat Nation" (Eries.)

This tribe is located by all south of Lake Erie. Bancroft places the Andastes on the lake between them and the Iroquois. There can be no doubt that this is wrong; though it may be considered at least doubtful whether the Eries extended beyond the lower end of Lake Erie, or even to its eastern extremity. The map of Charlevoix places them along the Western Reserve, and extending somewhat east of it. Mitchell's map, of 1755, places them "south of Lake Erie." The earlier maps of De Lisle, the great French geographer, and Coxe, give them the same location. The Eries were so entirely destroyed, after a war of great ferocity, that no remnant of them has ever been satisfactorily identified. The whole story, the occupation of the Eries, the coming of the Wyandots, the final triumph of the Iroquois, and the flight of the Eries, is supposed by Mr. Schoolcraft to be represented in an "extensive" and "well sculptured" inscription on Kelley Island. We can probably rely with much more certainty upon the French accounts and even Iroquois traditions.

The Iroquois then turned their arms against the Andastes occupying the upper waters of the Alleghany and Susquehanna, they being conquered, all the bordering cognate tribes were subject to the Iroquois, and they reached the

NOTE.—A too brief article on the Eries, by Mr. Shea, in the new American Encyclopedia (1874) says the greater part of the Eries were destroyed, and the balance incorporated with the Senecas.

Algonquins on every side. The Hurons, Eries, and Andastes had been greatly feared. What must be the strength and fierceness of their conquerors? The terror of the Iroquois seems to have extended far and wide, and saved them many battles. Added to this was generally their superiority in fire arms. The Dutch established a trading post at Fort Orange (Albany,) in 1615 and trade commenced with the Iroquois for furs in which they were soon supplied with arms. Generally hostile to the French, they were constant to the Dutch and English; having no quarrel for 150 years. The extent of subsequent Iroquois conquests has been much debated. One side represented by Colden and Governor Clinton; the other by President Harrison in his discourse before the Historical Society of Ohio. The first relying altogether on the Iroquois accounts, the other relying too much on the traditions of the Western Indians. It seems to be well settled, however, that the Iroquois continued to occupy a considerable portion of Ohio at will. The memorials and reports of English officers show that the Iroquois, whose own country had not much game, considered Ohio their best hunting ground. A considerable portion of Northern Ohio east of Sandusky seems to have continued to be, even after the Revolution, a partly neutral ground, permanently occupied by no tribe, no doubt the bloody field of many small contests.

But the Iroquois extended their arms further. Across the peninsula north of Lake Erie they attacked the "Chitagticks" or Illinois with varying fortune, but with such success, that their pre-eminence was acknowledged, though they may have occupied no new territory. Then they warred with the "Twightwees" or Miami. Colden's "Five Nations" is full of this war, which was to some degree carried on across our territory. He says they had entirely subdued the Illinois in 1685, and resolved to call the Miami to account for the disturbance they had given the Iroquois in beaver hunting, beaver being the most valued fur. In 1684, Garangula, a celebrated orator, whom Colden thinks resembled Cicero—

even in his features—stated to the French that the Iroquois had knocked the Illinois and Miamis on the head because “they had cut down the trees of peace which were the limits of our country; they have hunted beavers on our lands; they have acted contrary to the customs of all Indians; they have left none of the beaver alive; they have killed both male and female; they have brought the *Satanas* (Shawnees) into their country to take part with themselves; they have designed us ill. We have done less than either the English or the French. They have usurped the lands of so many Indian nations, and chased them from their own country. This belt preserves my words.” The principal beaver hunting-ground seems to have been north and northwestward of Lake Erie, being expressly pointed out as such in a provincial report to England. There were beavers in Ohio, perhaps less plenty, and the title of the Iroquois there may have been less disturbed.

According to the French memoir of 1687, they had attacked the Miamis and Illinois at Fort St. Louis, built by La Salle on the Illinois in the neighborhood of the Mississippi (meeting La Salle himself), massacred and burnt a large number, carried off many prisoners, and threatened an entire extermination. They had ranged the whole of Ohio, and country south and west of it.

On the south and southeast of their country they had defeated and driven away the Shawnees, who had gone westward; received by the Miamis and for many long years holding their lands in Southwest Ohio, and southwest of that, as the property of the Iroquois.

They had long before made “women” of the Delawares who, gradually moving westward, began to occupy Southeastern Ohio, all the while acknowledging the supremacy of the Five Nations. About 1700 “*Messieurs les Iroquois*” as La Hontan calls them, were at the acme of their power. Morgan makes their nominal government to extend over New York, Delaware, Maryland, New Jersey, Pennsylvania, the north and west of Virginia, Ohio, Kentucky, North Ten-

nessee, Illinois, Indiana, and Michigan; a portion of New England, and great part of Upper Canada. The government was, of course, slight, for an Indian, as La Hontan says, "believes in no ruler but himself."

Governor Dongan, about 1684, writing to the home government, says: "The Five Nations are the most warlike people in America, and are a bulwark between us and the French and all other Indians. They go as far as the South Sea, the Northwest Passage, and Florida to war." In 1685, the memoir to the French government of M. De Nonville, says the French need never expect to subjugate the Senecas, "except we be in a position to surprise them." The orator, Kaqueendara, delivered to the French the thoughts of his nation in these words: "You think yourselves the ancient inhabitants of this country, and longest in possession; yea, all the Christian inhabitants of New York and Cayenquiragoe (Governor of New York), think the same of themselves. We warriors are the first, the ancient people, the greatest of you all."

The Iroquois held the key to Western trade, though they could not have it all themselves. The French could not have safe conduct, being closely watched and attacked, for fear of their supplying the Western tribes with arms and ammunition. The English lost the trade because the Iroquois were between. Peace was plainly for the interest of the English; and there was much argument showing that the trade passing either north or south of Lake Erie must meet at the Niagara, so that the English, with advanced trading posts protected by the Iroquois and with cheaper goods, could get it. They persuaded the Iroquois to receive the Illinois and Miamis as friends. Then came the struggle between the English and French, for territorial sovereignty. The French claimed the territory watered by the Ohio and between and around the lakes, because first discovered and explored by them. The English claimed sovereignty over the Five Nations, and therefore over all land conquered by them. Thence the English interest in extolling the extent and strength of the Iroquois government. The French

replied that their discovery was before the Iroquois conquest.

Governor Burnet, in 1721, thinks the French have no title by occupancy to the West, as the Iroquois were before them, and had used the lands as a huntingground, having subdued the old title and conveyed their title to Great Britain at Albany, 1701, in these words: "We do give up and render all that land where the beaver hunting is," etc., "to Coraghkoe, our great King, and pray he may be our protector and defender;" in which very treaty he says complaint was made of the French settlement at Detroit. The Governor should have added to the grant the following words: "To be protected and defended by his said majesty, his heirs, and successors forever to and for our use, our heirs, and successors," meaning the grantors.

The deed of 1684, under which Ohio was claimed, was similar, and even more explicit. The English, however, often claimed absolute title of the lands under these instruments.

Governor Tryon, in his report of 1774, puts the original title of Great Britain on the ground of the submission of the Five Nations to the Crown. There seems no doubt that they never did submit, but always regarded the English simply as allies, as they were. Practically the title of the Indians seems to have been recognized by subsequent purchase. From about 1696 to 1755, the French and Iroquois were at peace. The latter occasionally troubled distant tribes, but their fierce wars were ended. Some of them, chiefly Senecas, emigrated to Northeastern Ohio, settling therein on friendly terms with their dependents, the Delawares and Shawnees, and inter-marrying with them. Government among Indians was loose, and war was sometimes as accidental and without plan as the chase. The Ohio Indians were sometimes hostile, when the Six Nations proper were quiet. In 1768, a purchase was made of lands on the Susquehanna. The Ohio Iroquois not being included in the distribution, were dissatisfied, and some of them returned to New York, thinking their share in future sales might be more secure. The history of those who remained can be more easily followed, in the history of the tribes with whom they were associated. One of their

number, Logan, a Mingo, or Cayuga chief, was a man of mark and power in Ohio history, whose wrongs, vengeance, and eloquence are known throughout the world. His band remained in Ohio until a late day, receiving from the United States, in 1817 and 1818, grants of 40,000 acres of land called the "Seneca Reservation," where Seneca county now is, and where they remained until moved West in 1831.

Although the Delawares prior to 1765 agreed to stand by such conveyances as the Iroquois might make, and the latter expected the Shawnees to do the same, the Ohio tribes were dissatisfied. The whites sometimes quarreled with them, and sometimes purchased more than once.

According to a valuable unpublished map,* made by Colonel Charles Whittlesey, the occupation of Ohio from the French war to the Revolution was as follows: The general western limits of the Iroquois proper was a line running through the counties of Belmont, Harrison, Tuscarawas, Stark, Summit, and Cuyahoga. The Delawares occupied the valley of the Muskingum, their northern line running through Richland, Ashland, and Wayne; the Shawnees the valley of the Scioto, the northern line being a little lower than the Delawares; the last two tribes occupying as tenants of the Iroquois. It will thus be seen that the Iroquois had not only admitted sovereignty, but actual legal occupancy of the greater part of Ohio.

Sir William Johnson, the most influential and sensible agent with the Iroquois the English ever had, saw that it was worse than useless to rest any claim to Iroquois territory on the old treaties, and in 1764 represented to the home Government "As the (then) Six Nations, Western Indians, etc., were never conquered by the French or English, nor were subject to laws, they considered themselves free people; that the English must be cautious not to circumscribe limits too far; that in the treaty then pending (in reference to lands east of the Ohio) the bounds should be clearly understood, and the Indians paid for all lands without that boundary when they were wanted." He stated that the Six Nations and confederates extended far enough so that they not only claimed many parts south of the Ohio, but many of their

*NOTE—Since published in 1872 in Walling & Gray's Atlas of Ohio.

people were actually settled south of it, their claim however not extending south of that part below the falls.

At the treaty of Fort Stanwix, 1768, the Iroquois deeded to the Alleghany river. They ceded to the United States all the land west of the east line of Ohio in 1784. In 1786 they united with many western tribes in an address declaring all treaties void unless all joined, but, nevertheless, made a treaty where all did not join in 1789. The pioneers of the Connecticut Land Company, on their way to the Reserve, also met the Iroquois in treaty at Buffalo, in 1796. There were other treaties and deeds before these which deserve mention, but these transactions demand a separate paper. I have only referred to them to show the general connection of the Iroquois with Ohio.

Both the British and Americans courted these Indians at the opening of the Revolution, but the influences of the Johnsons, and avaricious traders and land speculators was too strong. They adhered to the British and committed the usual atrocities of Indian warfare, which excited popular indignation on both sides of the sea. In an English caricature of the time, George III. is represented seated with his Indian ally in a cannibal feast, wherein both gnaw the same bone, of which the Indian has the best share, while the King holds a skull filled with smoking punch. The Iroquois battles, however, were not fought on Ohio soil.

Their confederacy, perhaps, exerted an influence toward the union of the colonies. At the Lancaster treaty of 1744 Canastota said: "Our wise forefathers established union and amity with our neighboring nations. We are a powerful confederacy, and by your observing the same methods our wise forefathers have taken, you will acquire fresh strength and power; therefore whatever befalls you never fall out one with another."

At the Albany Convention of 1754, before the French war, such a union of colonies was recommended by them. And perhaps the general influence and example of the confederacy, toward the union of States, has really been as important in the history and condition of our State, as the previous direct conquest and occupation of its territory.

Western Reserve and Northern Ohio HISTORICAL SOCIETY.

NUMBER FORTY-ONE.

ANCIENT EARTHWORKS—NORTHERN OHIO.

BY COL. CHARLES WHITTLESEY.

Ancient Earthwork—Lot 14, Copley, Summit County, O.

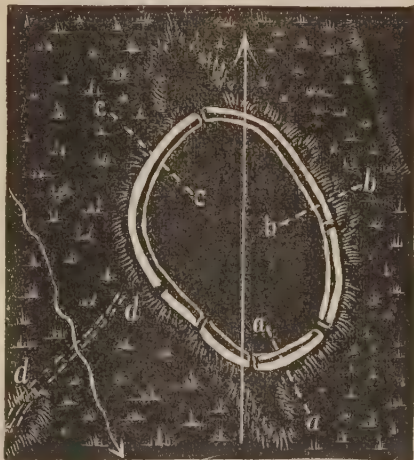
This place is known in the region as the "Island Fort." Mr. P. P. Cherry, of Wadsworth, Medina county, O., examined the work early in August, 1877, and made a field sketch, which he sent to this Society. Mr. D. C. Baldwin, of Elyria, and myself, had an appointment to meet Mr. Cherry on the ground on the 17th of August, and make a detailed survey. We failed in our connections, and the survey was made by Mr. Baldwin and myself.

On the headwaters of Wolf creek, which is a tributary of the Tuscarawas, there are very extensive swamps, in which there are a few lakes, or ponds, known as "Black Pond," "Shackalog Pond," etc. In these swamps are low knolls of drift materials, such as form the adjacent hills, principally gravel and hardpan. These knolls are called "Islands," such as "Fox Island," "Sugar Island," etc. The one on which this earthwork was constructed is called "Fort Island." It is yet covered with timber, principally beech and sugar tree, the underbrush partly cleared away.

Under the shade of these trees the people of the neighborhood hold their picnics and other celebrations. Very little timber has ever grown on the lowest and wettest part of the extensive bogs which lie along the

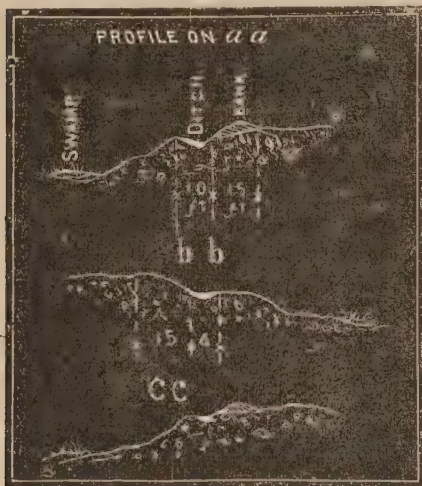
margins of the streams. A portion of the swamp land is now in grass, affording excellent pasture. The streams are everywhere sluggish.

ISLAND FORT—LOT 14, COPLEY, SUMMIT COUNTY, O., SURVEYED AUGUST 17, 1877.



Long diameter, 244 feet; short diameter, 196 feet. Scale, 200 feet to the inch. *d, d.*—Remains of a beaver dam.

Prior to the settlement by whites, about sixty years since, the region afforded a congenial home for the beaver, whose dams and other works are still visible. Fort Island



has not a smooth surface, and shows little sign of occupation. The north end is the highest, rising twenty feet above the swamp; the south end fifteen, and at the east side on *bb*, only ten feet. Near the center it is lower than at either end. Besides hummocks, caused by the overthrow of large trees by the wind, there are irregular mounds and depressions that appear to be the remains of the original rough surface of the drift gravel never smoothed by man. In recent times fresh pits have been dug by curiosity hunters, and by those who hoped to find treasures, which the divining rod informs them are hidden there. The earth is everywhere fresh and gravelly, and not of the black, rich soil, or kitchen refuse, usually found within ancient earthworks. There are seven openings—all of them narrow. In two cases there is a passage across the ditch, and no corresponding one through the embankment. As the profiles show, the rise of the wall from the inside is slight, only one and two feet. The breadth of the ditch varies from six to eleven feet; of the wall, ten to fifteen feet. From the bottom of the ditch to the top of the wall is now four to five feet. The outline of the island is more oblong, than the fort sloping more gradually at the north and the south ends, than at the sides. Unless there were pickets or abattis in or near the ditch, or the swamp was covered with water, it was not a place of great natural strength, but must, I think, be regarded as a fort, and not an intrenched village. It is easy to flood the

low grounds by dams. On the west side are the remains of a low beaver dam, *dd*. The brook which is between the island and the main land on the west, is only a few feet wide. Opposite the north end of the fort, west of the brook, are a number of irregular cavities near the level of the swamp, such as I have seen on Lake Superior, made by beavers in similar situations. There is a variety of the beaver, which prefers burrowing to building houses. When these burrows fall in, they present an appearance like these cavities. There are others, sixty or eighty rods, lower down the brook on the east side.

Ancient earth forts, with exterior ditches, are often seen in Ohio, occupying the crown of a hill. By flooding the swamp this would become an island, equally inaccessible, as a precipitous hill. The race of ancient earth builders thoroughly appreciated the military advantages of position. In Florida the Spaniards found Indian stockades surrounded by running water. Champ-plain found similar works among the Iroquois in 1615, which he attacked in the valley of the Onondaga.

Fort Hill, Cuyahoga County, O.

About three miles north of Berea, the forks of Rocky river unite at the foot of a vertical bluff of blue shale, about 100 feet high. In the remote past the junction was nearly a mile lower down the stream, in an easterly direction. The west branch then made a bend to the north, with vertical shale bluffs on either bank, which remain nearly entire. Where the road now crosses the united streams on a bridge, was then a narrow neck of shale, against which the streams acted on opposite sides until it was worn through, leaving the isolated plateau called

FORT HILL, NEAR BEREA.



A.—Enclosed space. *a, a, a*.—Embankments and ditches. Scale, 200 feet to the inch.

"Fort Hill." It is about five acres in extent with a nearly perpendicular face on all sides. This space is on a level with the surrounding country. Its most easterly point was fortified in ancient times by a triple line of embankments, *aaa* with external ditches. On the south side the river runs at the base of a natural wall of shale eighty or ninety feet high. On the other side of the point, this soft rock has decomposed and fallen away since the change of the channel, but is now very steep and difficult of access.

On the north side of the plateau there are two ravines leading down to the narrow valley of the old river. Through these an attacking party could easily ascend the bluff, where they would be on a level with the fort (*A*). The easterly part of this flat hill-top is yet in timber, where picnics and neighborhood parties are frequently held. Only a small space (*A*) is fortified, as shown in the plan, but originally it must have been larger. It is triangular in form, the perpendicular along the middle being 150 feet in length. At a point where the inner bank is least injured it is now fifteen feet wide at the base; the ditch is eleven feet broad, and from its bottom to top of embankment is four feet. The other walls are less high, and there are no entrances or gateways visible. This is not an uncommon feature in ancient earth forts. The occupants must have had steps, or ladders of wood leading over the banks, that could be drawn in after them. The destruction of the southern face by the wash of Rocky river front is quite rapid. Probably another hundred years will see it carried entirely away.

Mound on Kelley's Island.

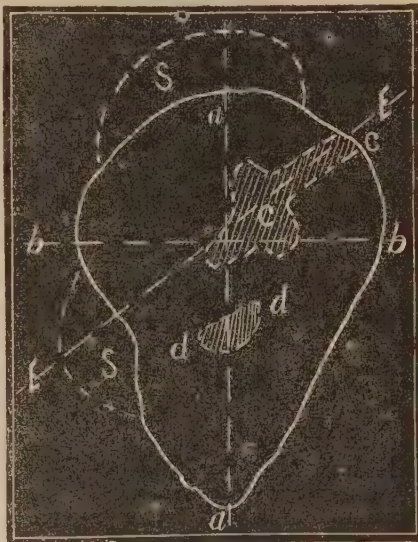
Being on Kelley's Island, in Lake Erie, opposite Sandusky Bay, in 1870, I caused the largest ancient mound on the island to be partially opened.

It is situated toward the northeast part, on the land of Mr. Hamilton. The form is heart-shaped, as indicated by the outline of the base, on the plan here given, the two diameters being 46 and 60 feet.

It is based upon a bare surface of lime rock, highly polished and grooved by the ancient continental glacier of the ice period. Most of the lower portion $2\frac{1}{2}$ of the profile, is a mixture of clay and mold, that must have been scraped together from places not immediately at the mound. It is quite compact, and contains fragments of charcoal, rotten wood, and limestone. Over this is a concentric layer of about a foot thick of the dark surface mold, also containing bits of charcoal. The charcoal is scattered through the mass as though it formed part of the soil

which was brought together to construct the mound. An excavation had been made at *d d*, about two feet deep, from which was taken the under jaw of a wolf, at 4, of the

ANCIENT MOUND—NORTHEAST PART OF
KELLEY'S ISLAND, SURVEYED, NOVEMBER,
1870.

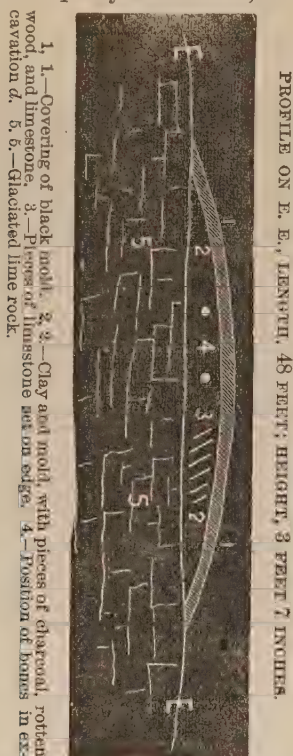


a, b, c.—Outline of base. *a, a.*—Long axis, 60 feet; course, northwest and southeast. *b, b.*—Short axis, 40 feet. *c, c.*—Form of main excavation. *d, d.*—Form of smaller pit. *s, s, s.*—Sunken places.

profile, and a stone flesher. Mr. J. C. Huntington said that the late Datus Kelley had used these Indian fleshers, to clean hides before they were put in the vats for tanning.

At 3, in the compact portion, was a series of flat, rough pieces of limestone, laid over each other at an angle of about forty-five degrees. Under them were helices, the bones and scales of fishes, of ducks and other birds, specimens of which are in the museum of this society. At *s s s*, on the west and northwest side, are slight depressions. On the land of Mr. Ward, about a mile west of the mound, is a partially destroyed work forty feet across, consisting of a low bank of earth and limestones, enclosing pits that resemble ancient caches. The road in front of his house passes through the enclosure. Two fleshers were found near there which he donated to this society. Near the burying ground, on the north and south road, about half a mile west of these caches, two human skeletons are reported to have been found, under a fallen slab of lime rock—a man and a woman. Flint implements are numerous on this island. Mr. Charles

Carpenter has a large collection, among which is a rare flint chisel, for cutting wood. He found many years since in the crevice of a quarry of limestone, several feet



below the surface, a large collection of unused flint arrow points, cutters and lance heads.

In Mr. Calkins' quarry, on the north side of the island, is a bed of chert, or imperfect flint, which may have been used in the manufacture of these implements. Within the old fort described by Captain Eastman, in Schoolcraft, large numbers of human bones are turned up by the plow. Under the Indian occupancy this island must have been populous, for there are in many places, partially obliterated works of prehistoric date. The islands and the shores of the west end of Lake Erie are the best of fishing grounds, where both savage and civilized man can procure an excellent living with little labor.

A model of the inscribed rock, copied by Captain Eastman, and commented upon by Mr. Schoolcraft, has recently been placed in the Western Reserve Historical Society's museum, by Dr. E. Sterling. As the figures are rapidly being obliterated, this restoration,

which is on a scale of one inch to the foot is more satisfactory than the original.

Old Fort, Near Willoughby, Lake Co., O.

In the summer of 1877, Mr. L. S. Philips, of Little Mountain, Lake county, O., presented this society the largest kettle of pottery in our collection. It was found in a very perfect condition in a crevice behind one of the huge blocks of conglomerate, in front of the Mountain House, broken away from the stratum which forms the surface rock of the mountain. This is an isolated rock, about a mile in diameter, nearly flat on the top, and yet covered with the original forest of pine, hemlock, oak, chestnut, and hickory. This conglomerate rests on a stratum of soft, blue shale where numerous springs of the purest water issue at short intervals, around the mountain. It rises 100 to 200 feet above the surrounding country at the base, attaining an elevation of 600 to 620 feet above the lake. One of the Government stations for the survey of the lakes, has its tripod of 120 feet in height, near the highest part.

The immense conglomerate blocks that separate from the mass on all sides, and move slowly down the slopes, produce crevices and rock shelters, where it would be presumed the aboriginals would take up their abode. Stimulated by the discovery of Mr. Philips, a deputation of this Society repaired to the mountain early in August, with high expectations of further discoveries. Besides the president and secretary, there were Messrs. P. M. Hitchcock, and D. C. Baldwin, members. After two days' thorough search among the fissures and rocky masses of the crest of the mountain, we found, *nothing*. Captain Pedrick, who lives on the lake shore, at the mouth of the Chagrin river, below Willoughby, had informed us of an ancient fort and relic on the bluff opposite his house, half a mile from the lake. The entire delegation accepted his liberal proposition to examine this spot, and quarter at his residence. The bluff is a blunt point of land, composed of drift hard pan, about thirty-five feet high, at the base of which the river is rapidly wearing away the materials, which slide down in narrow benches. At the upper side is a ripple, and in front of it, on the other bank low flooded land, with sluggish bayous extending to the lake. What are called the walls of the fort, are about forty rods long across the base of the point, but nearly obliterated. The soil is yellow clay, extending nearly level with the work to the east, and has long been under cultivation. An old orchard occupies most of the enclosed space, which is about five acres.

Within the old lines there is a heavy accumulation of black soil, filled with kitchen refuse, one to three feet deep. Messrs. Joseph and James Worden remember when the embankment was double, or in two lines—the two crests about a rod apart, with a ditch between about two and a half feet deep. They have spent much time in excavating the remains of the old occupants, which are deepest at the crest of the bluff. They have a very complete cabinet of relics from these “kitchen refuse” heaps. The bones of wild animals, including the bear, deer, elk, woodchuck, raccoon, fox and wolf, covered with ashes and charcoal, compose a material part of the mass. We filled a bag with bones in half an hour.

Stone axes and mauls are not very abundant or perfect. Flint arrow points and broken pottery or shreds are common, but not numerous. The most striking feature of the collection of the Messrs. Worden is the number and perfection of bone awls, perforators and gouges. They made us a donation of twenty-three, which represent nearly all of those found in the shell heaps of Florida by the late Professor Wyman. We hope to be able to have them engraved hereafter. There are besides many fractured or split bones and horns, such as are usual in such places. Some of them were sawed across before they were broken, probably by the rough edges of flint spear and arrow points.

INDIAN RECORDS.

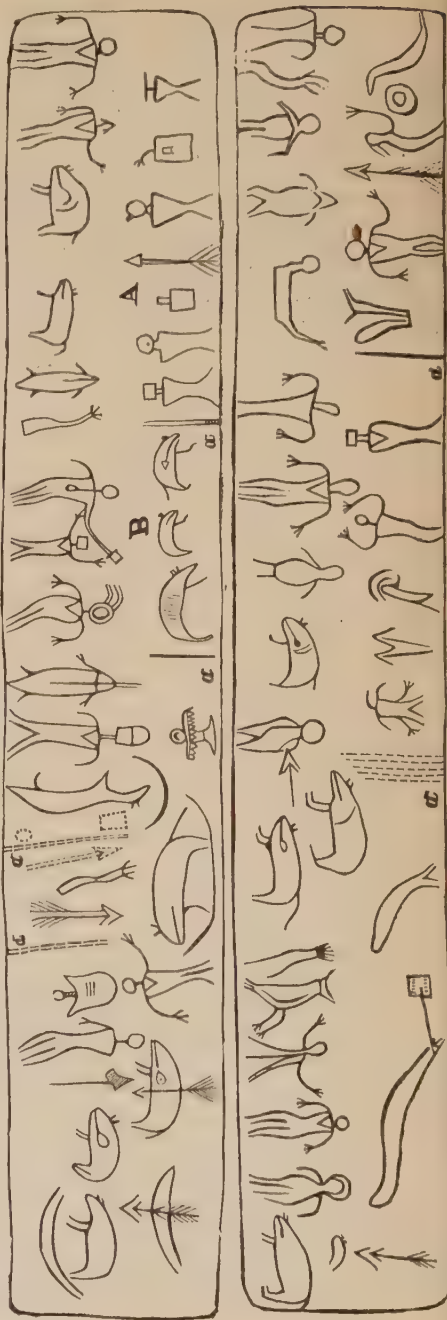
Autobiography of Kundlekan, a Chippeway Indian.

The subjoined pictorial record of his life, was made many years since by a Chippeway of Lake Superior. He delivered it to the Hon. A. C. Davis, of Detroit, who placed it in the Museum of the Natural Science Association of that place where it is now. The tracing was made in October, 1875, by Bela Hubbard, of Detroit. The engraving is from a photograph by E. Decker, of Cleveland, reduced to one-third the original size

The signs or characters are cut with a knife on both sides of a flat piece of sugar maple wood, less than one-fourth of an inch thick, wrought out by the Indian himself, for this purpose. The upright lines at *a*, *a*, *a*, appear to be divisions in the narrative, for the purpose of grouping events. He explained to Mr. Davis that this board contained the principal occurrences of his life, which any other Chippeway could read. How it should be read, whether from right to left or the reverse, or whether the inverted parts are to be taken in connection with those below, is not settled. The partitions *A* and *B* are colored vermilion red. It corresponds with the general character of the Indian pictorial writing, of which numerous examples are given by Schoolcraft, and shows a close relation to the rock inscriptions of the United States. It embraces the usual variety of uncouth men, animals, and implements which characterize the rock sculptures. Between the two sides of the board there does not appear to be any connection in regard to the sentences or paragraphs, though there must be as to dates. They are all, without much doubt, the work of people in the condition of savages. I saw this Indian on the Ontonagon river in 1845. He purported to have seen Alexander Henry in that region in 1769-70, who was engaged there in mining for copper and silver.

Inscriptions on Clay Banks, Bad River, Ashland County, Wis.

A few representations of recently inscribed figures are given for the purpose of comparison, with ancient stone inscriptions. A short distance below the portage, across a long, loop-like bend of the Mashkeg or Bad river, about three miles above the Odanah Mission, is a perpendicular bluff of clay, on the west bank of the stream. Steep clay and sand bluffs are common through the flat country below the Falls of Bad river. This

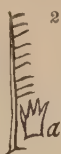




fifty feet long, and about ten to fifteen feet high. This space is completely covered with picture records, made by the Chippeways. No doubt many of them are old, but most of them have been made recently, or by men now living, often obliterating or cutting new inscriptions over old one



In my explorations on the waters of Bad river in 1846, 1849, and 1860, I passed them repeatedly, but having other objects in view, made only a few sketches. The effigies are grotesque outlines of animals, canoes, birds, fishes, men, women, trees, and other objects, animate and inanimate. My Indians and some of the half-breed voyageurs, professed to be able to read them. They said it was expected that every young man, when he was old enough to become a warrior, should retire to some solitary place and undergo a fast. The length of time he could do without food was a test of his bravery. Sometimes he perched in a tree, day and night, or sat on a rock or on a high mountain, without fire or shelter, in order to show his contempt of pain and exposure. In due time he natural-



ly had visions, in which his destiny or chart of life, was disclosed. Weak constitutions are unable to fast more than three or four days. When the incipient warrior had satisfied himself that his mission on earth was fully disclosed to him, he returned to his tribe and was received a man. Their version of this ceremony, and its consequences agrees generally with that of Chingwauk to Mr. Schoolcraft in 1839, as related in vol. 1, pages 13-14, of his "North American Indians." The symbols of his destiny were generally put upon record, in such a manner and in such a place as he saw fit, but generally on trees or rocks, along a traveled route. In some cases a full statement of the vision or visions, was written out in this pictorial mode, with his *dodem* or "totem" attached. I remember the meaning of only one, of which figure No. 2 forms a part. The tree with nine branches, and a hand pointing upward, signifies that the party making it had fasted nine days.

There is nothing in their customs to prevent other messages being left in such places. Their records include nothing historical in regard to the nations or their chiefs. Such matters are perpetuated by repetition from the old to the young, until every young man is thoroughly crammed. General story telling, and the recital of their traditions, is the literary life work of an Indian. His memory is a mental record, transmitted from generation to generation. The fidelity of such records is, however, very far from reliable.

Figures one to five are random copies from a large number of the Bad river effigies, not made to a scale, but they are fair representatives of Indian pictography.



Western Reserve and Northern Ohio HISTORICAL SOCIETY.

NUMBER FORTY-TWO.—MARCH, 1878.

ROCK INSCRIPTIONS IN THE UNITED STATES—ANCIENT ALPHABETS OF ASIA.

BY COL. CHARLES WHITTLESEY.

In the study of American intaglios, a comparison with those of the old world is the first consideration. Questions immediately occur, such as the following: If the new world was peopled from the old, should there not have been a transfer of their letters, their written languages, and especially of their inscriptions? Should there not be here traces of the cuneiform character, which is the oldest alphabet now known? Picture and hieroglyphic writings are common to all rude people, ancient and modern; but letter or alphabetic writing originated in Asia, and apparently nowhere else. In the valleys of the Euphrates and the Tigris, there existed alphabetical characters, at least 2,000 years before Christ.

The ancient people of North America had, so far as is now known, no such mode of expressing their ideas. Is it possible that these people are descendants of Asiatic nations who had an alphabet, of which abundant records remain to this day? Is it possible that such practice could be lost, merely by emigration?

In Asia, investigators of the ancient languages are able to trace their progress and changes, from time to time and nation to nation, with a certainty that amounts nearly to demonstration.

Abraham originated on the waters of the Euphrates, in Mesopotamia, or Upper Chaldaea. Inscriptions have been found there as old as his era, showing the existence at that time of a fixed written language.

The ancient Hebrew of the time of Moses probably came direct through Abraham, Isaac and Jacob, from the ancient Chaldaic,

in some of its forms. The Phœnician and modern Hebrew, are traceable with reasonable certainty to the same linguistic source. From the Phœnicians came the Greek and the Latin, which with the Sanscrit, have entered into all the modern languages of Europe.

Linguists trace the Sanscrit to an older language, related to the Chaldaic, thus reducing the alphabetical writings of Western Asia to one stock or center, at the region where the race is presumed to have originated.

Layard regards the Phœnician as closely related to the cursive form of the Chaldaic. The cursive and cuneiform appear to have been in use at the same time, and to be of equal antiquity. All the archaic forms of letters are generally regarded as derivative from various forms of pictorial and hieroglyphic figures, such as the Egyptian and the American picture writing.

Cesnola, in Cyprus, and Schlieman, at Hissarlik, Mycenae and Sparta, have thrown new light upon the Western progress of written languages. On the ornamented gold articles of the Assyrian period, uncovered at Curium in Cyprus, there are rude figures which resemble those of our North American Indians. Those of the Phœnicians are more elaborate and refined. Those of Greek origin, are of still higher artistic perfection.

Their alphabetical characters show a similar improvement, in passing through the same nationalities; which sustains the theory of a direct descent, from the Chaldaic through the Canaanites. For the purpose of comparison I give below samples of several of the archaic alphabets. Such a comparison will prove that

they possess no resemblance to American inscriptions, so far as they are now developed.

One thousand years B. C. the letters, and to a certain extent, the idioms of the old Chaldaic or Babylonian language, had assumed three forms, the Persian, Median and Assyrian or Babylonian. They are known as *trilingual*, but are rather modifications of one language, than representations of three. The grammatical structure and the idioms of language, both written and oral, undergo such rapid changes, that permanency is never a law of languages. Alphabets change with greater rapidity than idioms. It is now quite difficult for us to read the English of three hundred years since.

There are known to have been (39) *thirty-nine* varieties of the Greek letter; the earliest of which is thought by Dr. Schlieman, to be not more ancient than (1500) fifteen hundred years before Christ. Of reputed Phonician there are no less than (19) nineteen forms of letters, some of which are entirely wanting in some of the alphabets.

Those indefatigable European scholars who have for thirty years past been engaged upon the ancient inscriptions of the East, of whom *Rawlinson*, *Layard* and *Smith* are prominent examples, have mastered the three varieties of the cuneiform or arrow headed inscriptions. The large rock inscriptions, like those made by Darius, at Behistun, are like the Rosetta Stone, intended to accommodate people of different districts, who had naturally adopted varieties of the same language.

There is found with the "cuneiform" arrow-headed or wedge-shapen character of the Euphrates, the *cursive* or rounded letter, which appears to have the same relation to the cuneiform, that our written has to our printed character.

In the form of the letters there is no apparent relation between the cuneiform and the cursive, or between either of them and the square or modern Hebrew.

I insert specimens of both forms of the Chaldaic letter and of the Moabite, for the purpose of allowing a comparison with the Phonician and the Greek.

SAMPLE OF CURSIVE WRITING ON POTTERY
AT BIRS-NIMROUD.

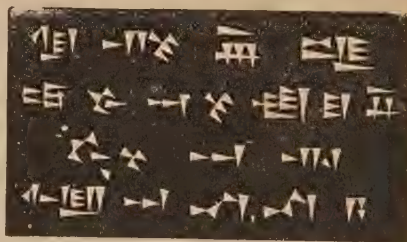
44 11 11 11 11 11
749699

Size of Nature—*Layard* Vol. 2, p. 133.

Mr. W. P. Fogg, of Cleveland, who has traveled extensively in Asia, brought from there many relics which are in the Museum of the Historical Society. In describing them he says—

"Among other antiques from Babylon which I was fortunate enough to secure is a small black cylinder of very hard stone with an exceedingly fine grain. It is an inch long by about 3-8 in diameter, and was picked up in the sand among the mounds of the ancient city. The surface of the cylinder is completely covered with an inscription in minute cuneiform letters very finely cut. A copy is given below, the letters being considerably magnified. For the translation I am indebted to the kindness of Prof. George Smith, of the British Museum."

SAMPLES OF THE ARROW-HEADED CHARACTER.



"The seal, or amulet, of a man named *Ki-zirtu*, son of the woman *Satumani*, belonging to the family of *Ishtar* and *Nana*."

This entire system being made up of one character or letter in the form of a wedge, is the *simplest*, and within reasonable probability the most *ancient* mode, of alphabetical writing.

Asiatic scholars however are not fully agreed upon the question, whether the cuneiform or the cursive is the most ancient. The wedge-shapen letter is best adapted to engraving upon stone and the rounded to writing on soft clay tablets, before they are baked. It is probable both styles were used at the same time, one for writing, and the other for inscriptions; as we now use the pen and the type; and that they are certainly as ancient as the time of Abraham.

Inscriptions upon rock were at that time very expensive; and within the reach only of Kings and Emperors, who had at their command the money and labor of all their subjects. Reading or writing was unknown to the masses, even among the Jews.

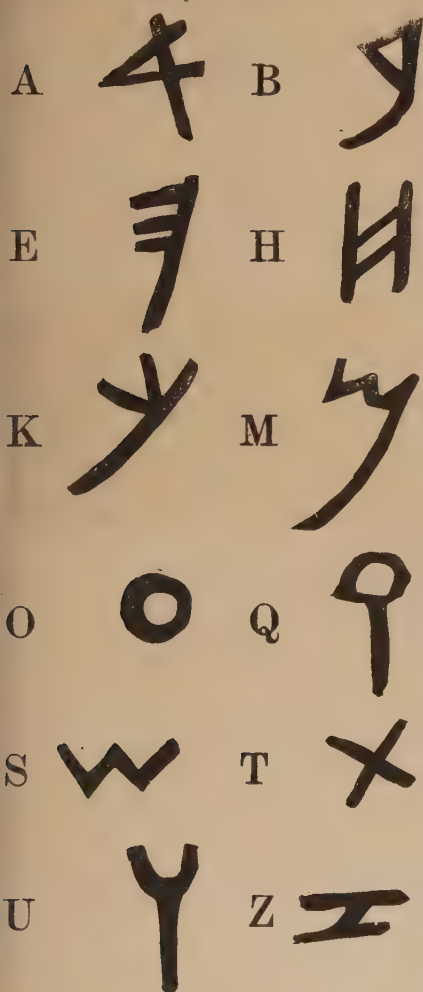
There has not been enough of the cursive recovered, to get a complete understanding of its use, in ancient times.

Its general style is so near the ancient Greek, Phonician, and Moabite; that there must have been a close relationship between them.

is found on bricks of the era of Nebuchad-
 ezzar, on vases of alabaster, and on vessels
 of baked clay. It reads like the Hebrew from
 right to left.

LETTERS FROM THE MOABITE STONE.

Size of Nature.



On this stone are *twenty-two* letters, the
 same as in the Greek alphabet, only *twelve* of
 which are reproduced here. Those to which
 they correspond in the Latin and English, are
 capitals placed at the left hand. Their
 identity in form, with the Phœnician and
 the Greek is so close, that Greek scholars read
 them without much difficulty.

There are also affinities in form with the
 Latin, for which it is not at present easy to

account. Neither is it easy to explain many
 other resemblances, and differences in ancient
 alphabets. Why should the square Hebrew
 letter of the time of Ezra, have grown out of
 the old Hebrew or of the Chaldaic, without
 any apparent resemblance?

This Moabite stone like many of the in-
 scriptions made by Asiatic Kings, is a boast-
 ful record of individual exploits. Their
 defeats they did not think it necessary to
 place on record. *Mesha* a King of Moab 890
 years before Christ, revolted successfully
 against Omri King of Israel and his son Ahab.
 He caused a brief relation of his success to be
 engraved upon a block of basalt prepared
 with great labor. Its dimensions are 3 ft. 8½
 in., 2 ft. 3½ in. and 1 foot 1¼ in. Most of the
 characters are still perfect; and are well re-
 presented in the above cuts. It was discovered
 by the *Rev. G. A. Kline* of the Palestine Ex-
 ploration Society, on the 19th of August,
 1868, in the rubbish of a fallen wall at Dibon
 in Moab, not far east of the Dead Sea. A
 small part of the inscription is lost by the de-
 structive fury of some Arabs; who had a quar-
 rel over its ownership.

SEAL OF HAGGAI, SON OF SHEBANIAH OR
 SHEBNIAH.



*Size of Nature—Presumed to be Archaic
 Hebrew.*

It is surprising that with so much modern
 research in Palestine, so little has been found
 of the Ancient Hebrew Character. On the
 stones of the most ancient walls in Jerusalem
 no lettering or inscriptions are found, except
 the private marks of the Phœnician masons
 or builders.

After the return from the second captivity
 of Judah, 536 B. C., it was gradually super-
 seded by the square Hebrew letter, which
 has survived to our times. The above cap-
 tion is a translation made by *Mr. J. Greville
 Chester*, for the English Exploration Society.
 There is nothing to indicate who Haggai was,
 or when he lived, except the depth of the
 rubbish which had accumulated over the seal.
 It was discovered by *Capt. Wilson* of the
 English Engineers, while excavating near the
 southwest corner of the old wall of the
 temple inclosure; on Mt. Moriah, in 1867.

This rubbish had accumulated to a depth
 of about (50) *fifty feet*, since the base of the
 supporting wall was laid. This stone was
 beneath two pavements, the second about 20
 feet beneath the first, or upper one. It is a
 compact black stone probably basalt such
 as was generally used for permanent inscrip-
 tions, in ancient times. It is less perishable

than any metal, except gold. There is in our cabinet an inscribed block somewhat like a pestle, brought by Mr. Fogg from the ruins of Nineveh; on which are four upright lines of arrow-headed letters, very finely engraved; many of them still perfect. The late Mr. Smith of the British Museum, decided that this engraving was made about 500 years B. C.

Both the Rosetta and the Moabite inscribed stones are of black basaltic trap. The Haggai seal lay about midway of the accumulation of rubbish, the bottom of which might be of the age of Solomon, or 1,000 years before Christ. If the increase was regular; we might infer something as to the age of this seal. But the increase was not regular, and this stone may have been buried as late as the rebuilding of the temple by Zerubbabel.

I also introduce what purports to be copies of both faces of a Jewish Shekel; issued by the first of the Maccabees (138) one hundred and thirty-eight years B. C.

THE OLDEST JEWISH COIN.



It is in the possession of *Dr. Robert Morris* of Kentucky, who states that the letter is in the Samaritan form of Hebrew, which by many scholars is regarded as equivalent to the old or archaic Hebrew of Moses. The two letters resting on the cup (right hand cut) give the date of its issue by Simon Maccabees. Those on the margin read "The Shekel of Israel." Around the bunch of flowers, or whatever the figure is intended to represent, is the sentence "Jerusalem the Holy."

Josephus states that the golden tiara or frontal worn by Aaron, the first high priest nearly 1500 years B. C. was in existence in his time A. D. 70. On this were the words "Holiness to the Lord." If this was the original frontal, the sentence must have been in the original Hebrew character. He also says the language is the same as the Samaritan Hebrew. It is reasonable to suppose that the copy of the Pentateuch found in the temple by Hilkiah in the reign of Josiah; 641-611 B. C. was written in old Hebrew.

Until the introduction of the square letter in Hebrew writings every human precaution was observed to have all copies conform literally and strictly to the original. It is probable that Hilkiah's copy was the original, or if not; was a copy transcribed under the closest scrutiny. Though many scholars still doubt if we know in what letter Moses wrote; thinking it possible it might be Egyptian in some of

its forms, the probabilities are that it was in archaic Hebrew. On the Jewish coins and on this seal, we probably have the same characters and these are not heiroglyphics.

It is generally admitted that Moses had the use of existing documents preserved by the Hebrews. Their genealogies must have been handed down from Heber, Nahor and Abraham, through the captivity in Egypt. It is probable that these writings were in one language, the same alphabet being used throughout. Moses was educated in Egypt and could write in Egyptian characters, but for Hebrew use, it is not probable that he adopted the language of their oppressors, a foreign people. It is scarcely possible that the Hebrews of his time, had lost their ancient language or its alphabetical signs.

The archaic Hebrew was without written vowels. Their introduction orally among the written consonants, required study and practice. It appears strange to us that a system so complicated, and liable to the gravest errors of reading, should have been adopted anywhere. It was done apparently by design, with a view to confine the reading and teaching of it to the Hebrew priests.

Of rock inscriptions in the United States, which I have seen; or copies of which I have examined; none have a closer resemblance to alphabetic characters, than those near Newark, Ohio. (See cut next page.)

A correct copy can be consulted not only of this but of several others, in the Report of the Centennial Commission of Ohio issued in 1877. The tracing was made by Dr. and Mrs. J. H. Salisbury of this city.

The Doctor has arranged all the figures in groups, and from these selecting all those which are radically different, finds them to be (23) twenty-three in number. There may have been many more, for a large part of the inscription had been obliterated.

Under the cliff is a deposit of the usual kitchen refuse, found in all rock shelters. Dr. Salisbury has described these figures, minutely, but only a brief abstract is here given

EFFIGIES ON ROCKS IN THE SUSQUEHANNA RIVER, PA., BY L. C. CORDES, OF HARRISBURG.

By the assistance of Col. James Worrall, of Harrisburg, Mr. Cordes, of that place, was induced to visit the Indian rocks near Safe Harbor, and to make tracings on muslin, according to our system. It is an object to have as many such copies from distant places as practicable, in order to make comparisons with the rock inscriptions of Ohio, in our collection.

Mr. Cordes entered upon the work with the zeal of an amateur. We feel the utmost confidence that his tracing is strictly faithful. His letter accompanying the muslin tracings reads as follows

BIG INDIAN ROCK.

This rock is in the Susquehanna, one mile from the mouth of Conestoga Creek. The rock is about one mile wide and runs in the easterly direction. The rock is one-third of the way from the Lancaster County shore. From the upper to the lower end is 92 feet, with a few small rocks lower end. It is 42 feet wide and 22 feet measuring from the bottom of the rock and rounded on the top; both sides are light, but it does not look solid - appears as if one rock was lapped over the other, forming like a huge stone wall. The top is very solid, there being only a few cracks. The surface is not entirely smooth on the top, but the inscriptions are, are about as smooth as a stone door-step. They are nearly in groups, as you will find them on the rock in tracing. They are very faint, and not knowing of them might walk over the rock and not notice them at all. They are only to be seen while the sun shines, but when the hand is passed over them, every one can be easily felt. The figures are not at least, very little. It appears to me they never were deep; they were like a mark made by continual pounding on the rock, which made those parts rough, while the other surface is smooth. The rock is light, with a few veins of whitish flint running through it. When the sun shines it looks as though it was strewn with pound-stones. (See view and cuts.)

The 'Little Rock' is the same kind--29 feet high, but has been wider. There is a piece about six or seven feet broken off by a log, and falling into the water, but one can be seen, which I marked on the

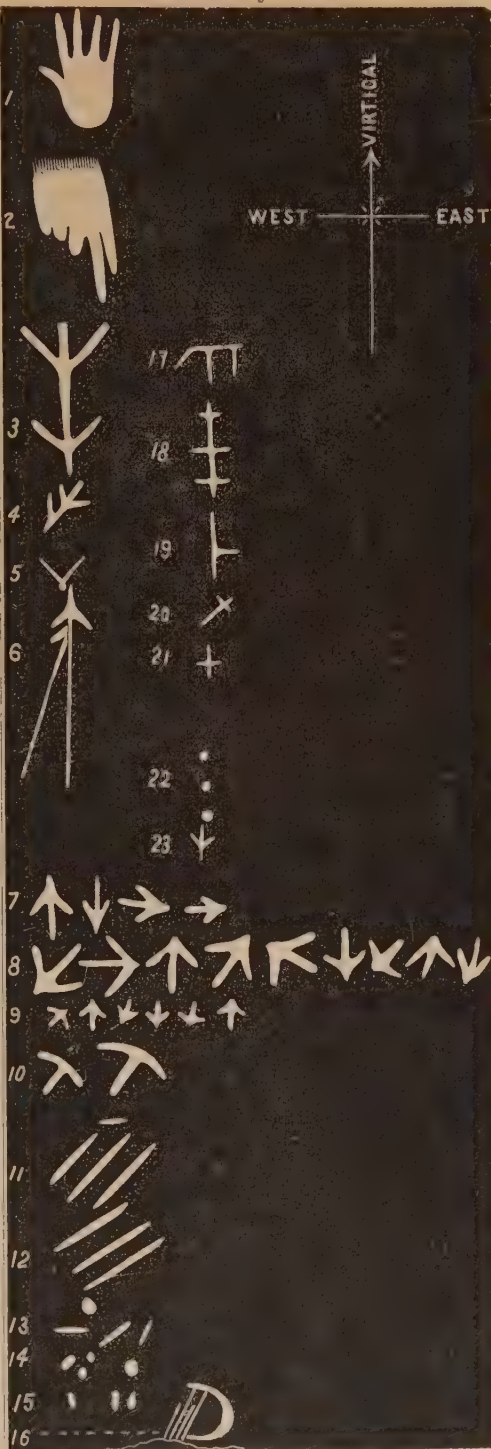
The cuts on this rock are all in one line on the top just where it commences to slope towards the water; and is the only smooth part of the rock, save one little place where a pound thing is. The other cuts are on the sides of the rocks, near the water's edge. They are all together just as you see them on the rock. This rock is about 100 yards above the 'Little Rock,' and about that much closer to the water. Both rocks are difficult to get to. There are hundreds of other rocks and the rapids rush wildly around and over them. It is my belief that the Indians here kept their women and children as a place of safety when they were out hunting, and that the rocks were made to wile away the time, and for no other purpose. However, this is not what we came here for. Having done our work and got blisters drawn on our faces and hands, as well as 'Indian hieroglyphics' on our muslin--also having obtained a good story--we bid the old rock farewell for ever. Too hot in June and, judging from the season, too cold in winter.

"L. C. CORDES.
Harrisburg, Pa., June 14, 1872."

The reduction of Mr. CORDES' tracing was made at Cleveland, by photograph, by T. T. CORDEN.

ASSORTED CHARACTERS NEWARK INSCRIPTIONS

Scale 1-18 of Nature.





VIEW OF THE BIG INDIAN ROCK, LOOKING NORTHWEST.

The figures are in groups, which are arranged in the engraving as near as practicable in their natural relation to each other. As the rock is a long oval, rounded on the top, the proportion cannot be exactly preserved on a flat surface. The margin of the plate (see next page) represents the low water line, which is irregular. Character of the rock, quartzose granite. Of course the relative spaces between the groups are not preserved in this mode of representation. The largest diameter of the stone is north-west and south-east. As the impression was taken by painting the artificial depressions and pressing a broad sheet of muslin into them, it now appears reversed, or turned—right for left.

GROUP NO. ONE—NORTH-EAST SIDE.

Snake; length, 34 inches. Human figures; height, 21 inches, 13 inches, and 12 inches; the one on the right is standing in a canoe. A rude modern ax; greatest length 21 inches. This tool cannot be more ancient than European occupations.

GROUP NO. TWO—SOUTH END.

Human figure; height, 11 inches; human foot, 11 inches.

GROUP NO. THREE.

Principally grotesque effigies of animals. As all the details are on the same scale, the size of the figures in all the groups are in proportion to each other throughout—that is, one-twentieth the original. On the rock the backs of these figures are downward, and the feet point upward from the water.

GROUPS NOS. FOUR AND FIVE.

These occupy the top of the rock near the centre.

GROUP NO. SIX—SOUTH-WEST.

A single animal, 26 inches long, tail included.

GROUPS NOS. SEVEN AND EIGHT.

This tomahawk has a close resemblance to the bronze axe used by the Romans, in the war against the Dacians, under Trajan, in the first century. The bird-tracks and spear-points are common on the rock inscriptions of Ohio, but the crosses, of which there are here three, are very rare. Turtles like the one on group eight are common.

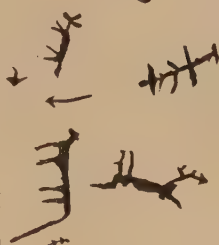
“LITTLE INDIAN ROCK.”

One hundred yards up the river from the “Big Indian Rock” Scale of figures, one-fifteenth of nature. This rock is the same hard quartzose granite as the other, more irregular in form, rising ten feet above low water. Both of them are a part of a ledge, which causes a rapid in the river at this place. There is substantially but one group, but as the figures cover a waving surface, in part sloping, and in part nearly vertical, they are represented in groups, the vacant space between them being much less than Plate No. One.

By what tools the Indians effected this work, in a rock so unyielding, cannot as yet be determined. On the sandstone rocks of Ohio there remains, in all cases, the marks of a pointed tool like a pick, but here the descriptions of Mr. CORDES, though very minute, do not indicate that such a tool was used. This work resembles the result of patient pounding with a stone or maul, such as the ancient miners used in the old copper mines of Lake Superior. Any

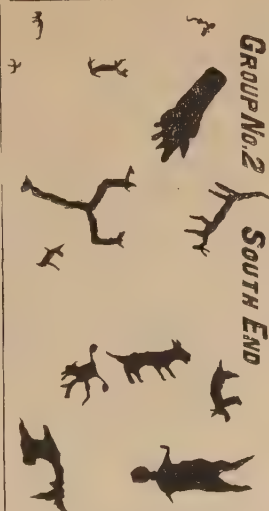
NORTH WEST END

No. 3



GROUP No. 2

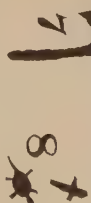
SOUTH END



SOUTH WEST SIDE



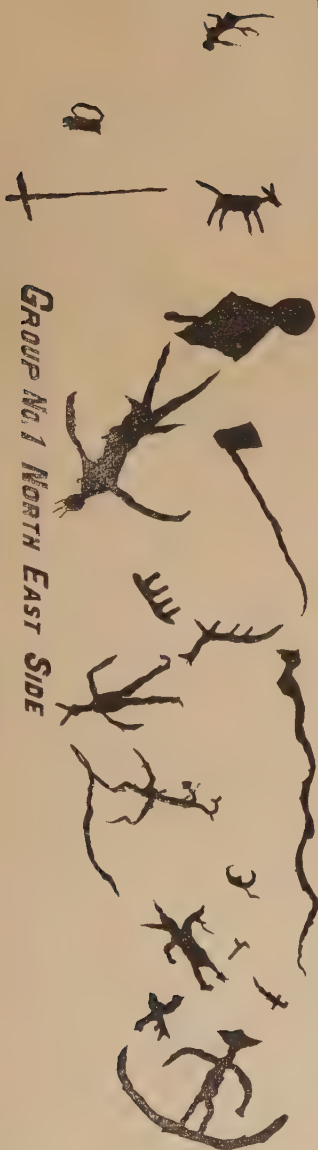
SOUTH EAST CORNER



TOP CENTER

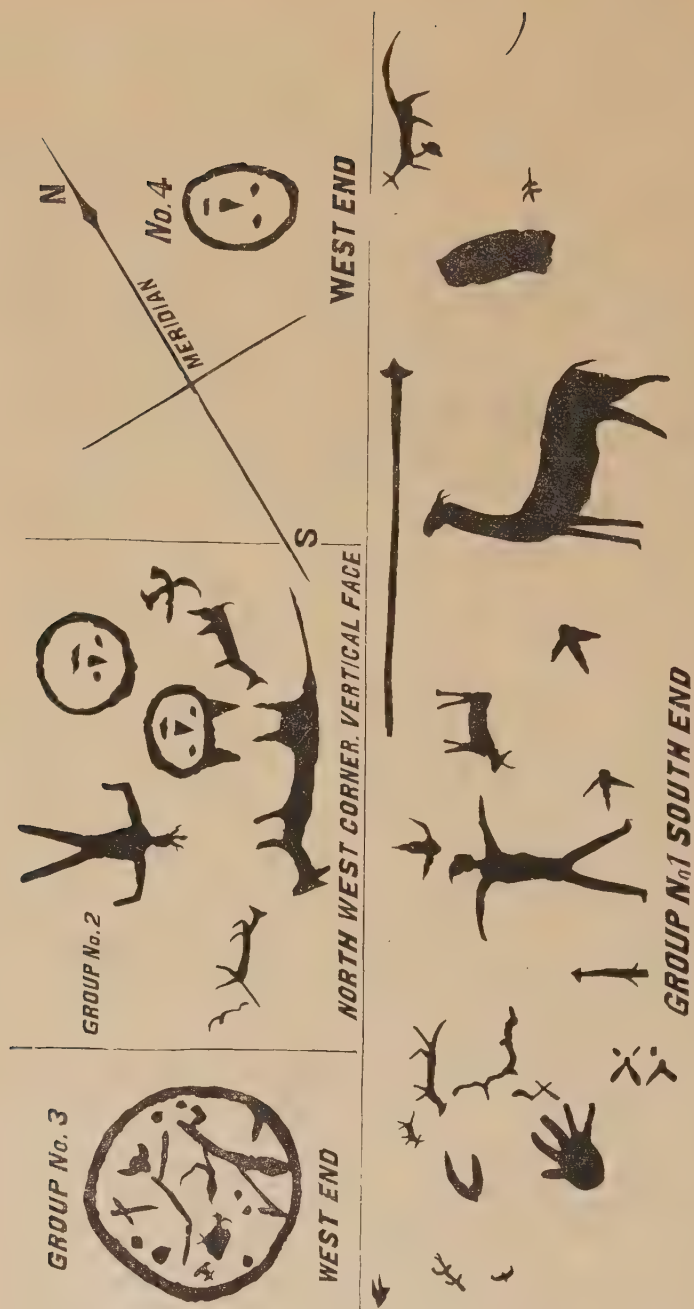


TOP CENTER



GROUP No. 1 NORTH EAST SIDE

BIG INDIAN ROOF—1-20 YINBAR.



LITTLE INDIAN ROCK--1-15 LINEAR.

hard boulder, or large pebble, with a corner or rounded end, would answer the purpose where the lines are broad, and it might have been held in the hand without a handle. Although some of these effigies date within the time of European discoveries, it is not probable the red man would have put his tomahawk or squaw ax, to such an use. The work was accomplished, no doubt, by stone applied to stone, with prolonged labor.

GROUP NO. ONE.

On the upper surface across the north-west end, the feet of a man, and the "Lama," point southwesterly. Although this animal has close resemblance to the Lama of South America, I use the name merely for convenience of description, and not in the sense of a naturalist. His total height forward is 17 inches; length of body, 13 inches.

The height of the man is 15 inches; length of spear, 30 inches; length of the hand, seven and one-half inches. The shapeless figure behind the Lama is probably the remains of a human foot, and is nine and one-half inches long.

There are the usual bird-tracks, and two characters that are not usual, a line and two crosses. Two of the animals are probably foxes, and the one between the Lama and the man, a deer.

As our present object is not to discuss antiquities, but to furnish reliable descriptions, we have little to add, beyond the statement that these intaglios are evidently the work of the red Indian, and form specimens of his picture-writing—his only mode of making records.

GROUP NO TWO.

This is at the north-west end of the rock, on a steep face, reaching down to the water, the animals being upright, their backs towards group No. One, as here represented. The large one probably is meant for an otter, 22 inches in length; height of the human figure, 13 inches, evidently a warrior with eagle feathers. Near the human face is an unknown bird on the wing. Human faces are common among the pictorial representations of our North American Indians, on trees, clay banks, and stones, but their meaning is by no means constant.

GROUP NO. THREE.

Here is something that is entire, and is, no doubt, a perfect record, unintelligible to us, but might be translated by an old Pennsylvania Indian. It is on the upper face of the rock, at the south-west corner.

NO. FOUR.

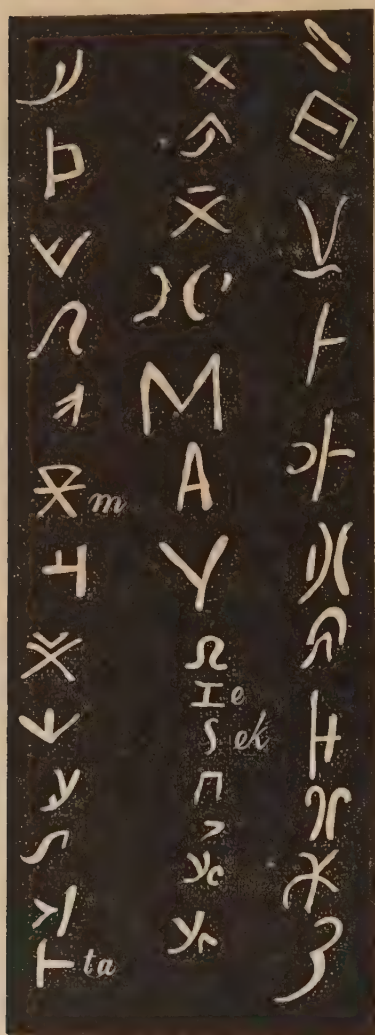
Is on a fragment which has been broken from the north-east corner, and fallen into deep water, beneath which there are other effigies.

Cyprus was the scene of very ancient settlements. It had been subjected to Assyrian, Egyptian and Phonician or Canaanite conquests, before the days of Agamemnon. It is presumed to be the Chittim of Scripture, colonized by the children of Javan. Its civilization appears to have been more ancient than that of Greece. Mr. Lang who was a collaborer with Cesnola, found in the ruins of a temple at Dali, a double or bi-lingual inscription in Cypriote, and Phonician. This enabled him to read the Cypriote character through the Phonician, as the Rosetta Stone enables Egyptian scholars to read hieroglyphics through the Greek. The Trojan characters are not yet admitted to be alphabetical, although attempts have been made to translate them by *Prof. Comperz* and *Prof. Haug*. After having made an experimental reading they admit doubts whether they are letters or symbols. On nearly all of the rock inscriptions there is among the picture writings isolated characters, that resemble letters: like those upon the Dighton rock. Unless it is assumed that the North American Indians had a smattering of several ancient Asiatic alphabets, these resemblances must be regarded as accidental. It would be as easy to make the bird track figures answer the purpose of an alphabet, as it was the arrow-head characters of the East, to which they have a close resemblance, but the authors of the bird tracks, did not attain to such a conception. In truth all forms of pictorial writing are more difficult of execution than any form of letters. The mere convenience of characters used in writing, does not appear to have had much influence over their form. Arabic, Armenian, Persian, Hebrew, German and Greek letters, are much more difficult of execution than the older cuneiform. An alphabet has recently been invented; composed alone of the circle and its parts; which is more simple than our Roman characters, but its simplicity will not cause it to be adopted.

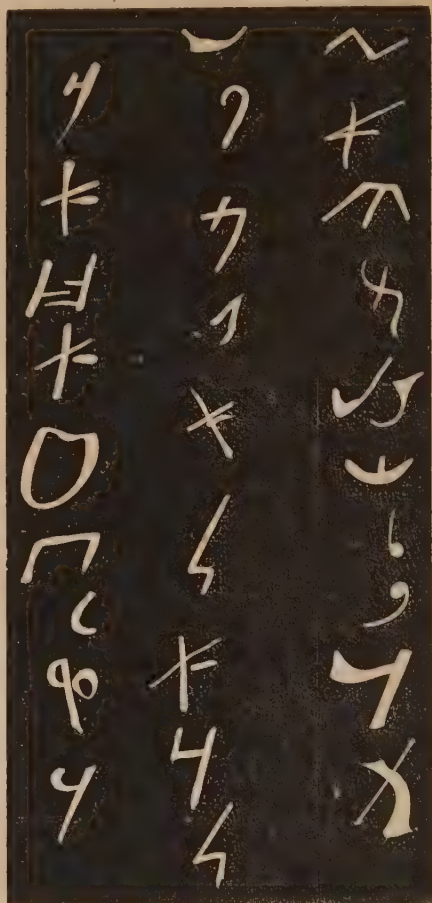
There lies before me upon a large sheet visible at a single glance, alphabets in Runic, Phonician, Greek, Egyptian, Hebrew, Arabic, Cypriote, Archaic English, Cuneiform, Canaanite or Moabite and Latin.

That some of these characters, or of those bearing resemblances to them, more or less remote; should be found mingled with the rude work of North American origin, is a very slender thread, on which to hang a conclusion, that our aborigines had the use of letters.

No alphabetical records or inscriptions have been left by the ancient Peruvians or Mexicans, who had progressed much further towards civilization, than the North American Indians. People who have a written language even in the form of pictures, or pictorial symbols, may develop an alphabet, but they do not retrograde, from letters to pictorial

SAMPLE OF ANCIENT CYPRIOTE CHARACTERS,
ISLAND OF CYPRUS, CESNOLA.*Size of Nature.*

signs, or hieroglyphs. Among the North American tribes, the modes of picture writing never reached the condition of a general system, adopted by common consent. Each tribe, and often each person adopted such figures as pleased them. Different tribes and in many cases persons of the same tribe read these records with difficulty. Their education has not yet attained to a system or universal plan even of symbol writing.

SAMPLE OF PHONICIAN LETTERS UPON ANCIENT
POTTERY, ISLAND OF CYPRUS, CESNOLA.*Size of Nature.*

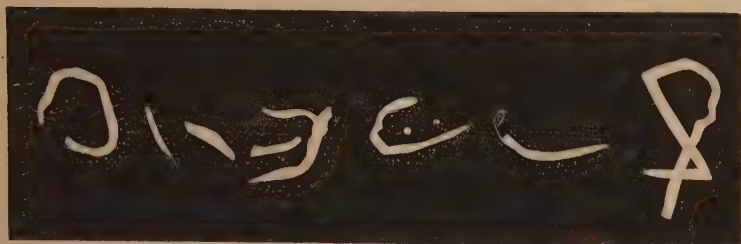
SEAL OF SHALLUM—1000 TO 1200 YEARS B. C.



The four Hebrew letters are four consonants, read from the right—L S L M—meaning when the vowels are inserted, "belonging to Shallum."

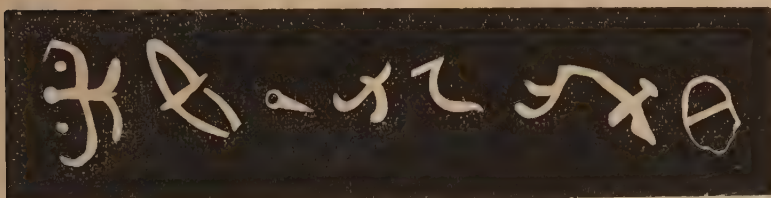
I have introduced the above examples of written or engraved letters, more ancient

FROM A TERRA COTTA SPINDLE WHORL, HISARLIK, $13\frac{1}{2}$ FEET BELOW THE SURFACE.



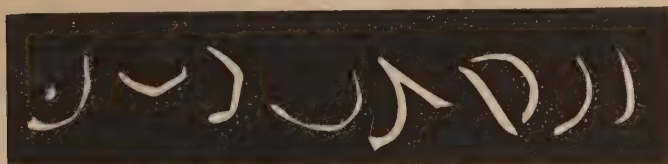
Size of Nature.—Not translated.—Schlieman's Troy, plate 51.

CHARACTERS ON A TERRA COTTA SPINDLE WHORL, HISARLIK.



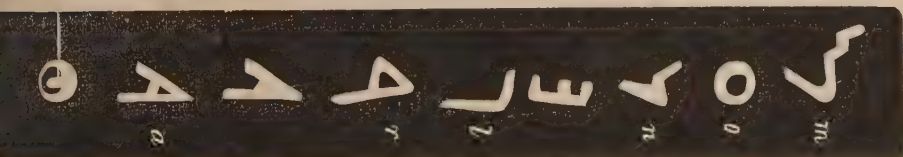
Size of Nature.—Schlieman's Ancient Troy, No 494.—Not translated.

INSCRIPTION ON A TERRA COTTA BALL, $1\frac{1}{2}$ INCHES DIAMETER, 4 METERS ($13\frac{1}{2}$ FEET) BELOW THE SURFACE, HISARLIK.



Schlieman's Troy, p. 372.—Size of Nature.—Not translated.

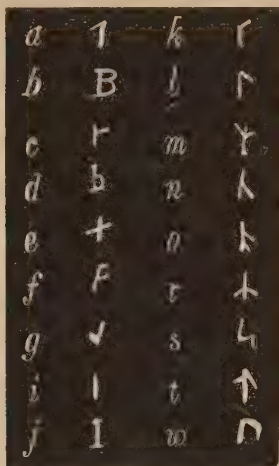
ARCHAIC GREEK LETTERS FROM AN INSCRIBED STONE—THE NAME OF A MAN.



Size of Nature.

than the Greek for the purpose of showing the marked difference there is between them and inscriptions in the New World. Why a thing so simple and natural as an alphabet, should have originated at only one place, and among only one people, is a very interesting enquiry, but which I shall not now discuss.

MODERN RUNIC—18 LETTERS



By an uncorrected error of the engraver the last letter is represented as w, which should be an "u," and the dot is not a part of the Runic original. As I have had only a small number of the forms of this alphabet to consult, I cannot say how various they are, or what precise era those here given represents, but presume it to be about five centuries since. The changes which the Runes have undergone is important, because some Danish archæologists believe these characters are found inscribed upon rocks in New England, by the Northmen of Iceland, and Greenland. It cannot be expected that the forms of letters in such rude inscriptions should be very regular. Mr. Fry the author of "Pantographia," London 1799, calls this language *Meso-Gothic*; with an alphabet of (23) twenty-three letters. Mr. Mallett (p. 230) has only (20) twenty. The Anglo-Saxon the Scandinavian, and the Runic alphabets, show so great a similarity, that they must be regarded as of one stock.

In four samples of these, the letter "B," is the same. F is nearly alike in Runic, Scandinavian, Anglo-Saxon, and in the Phonician of 1000 B. C. In the three first, i, l, m and s are substantially the same. Other singular resemblances run through the old alphabets of Italy, Greece and Phonicia.

Recurring again to the subject of letters

among the ancient North Americans, Mr. Merrill while examining our fac-simile of one of the Kelley Island inscribed, rocks, detected several very good Arabic characters on it. A vivid imagination with a mind predisposed to find resemblances, would discover two reasonably good English V's, an N, a Y, an indifferent Runic "l," and a Greek "p."

On the Barnesville rocks, it would be difficult to see more than one mark resembling a letter; but on the Newark inscriptions there are several; one of them a good cuneiform. If these are letters, and were all of one language, since they are not consecutive, having the relations of consonant and vowel; they in no sense, form words conveying ideas. On the tablets recently exhumed from a group of mounds near Davenport, Iowa; something like the same disjointed characters may be seen.

Among a labyrinth of effigies and other crooked and confused lines, on the notorious Dighton rock, of Rhode Island, is a very fair Scandinavian "y," which the noted Danish archeologist *Finn Magnussen* regards as the Runic "M." As I cannot consult his works, I use the abstract furnished by M. Gravier of Rouen in France, presented to the archæological congress at Nancy, in July 1875. The importance given to this inscribed rock, which does not differ materially from others in all parts of the United States, arises from its location; being the first to which attention was drawn, soon after the landing of the Pilgrim Fathers.

The Danish Runologists assume that there are enough Runic and Latin characters on the rock, to justify them in supplementing the records of the Icelandic Sagas, by interpreting the characters. Various copies represent them with as many variations as there are of the Grave Creek Stone. Accepting the "M" as a basis, Messrs. *Rafn* and *Magnussen*, attach to it a rude figure on its left, compounded by our letter A without the cross, and an inverted U; with a bar across the bottom. All these figures require to be engraved in order to make a good representation. They assume that this compound figure, is the equivalent of the Runic N, and that it is an abbreviation of the Danish word for *North*. The presumed "M" is also a representative character, and stands for men, and the whole therefore reads "Northmen." In *Meso-Gothic*, another and further meaning may be given to the same combination, representing "*Nam*" an Icelandic word for occupation. It follows that the Northmen occupied this country. To the left of these characters are what resembles three letters X, or a Roman figure 10, joined together without crosses at the

top, forming two enclosed lozenges. Connected with them on the left is an inverted capital letter L without the usual bars, at the ends of the lines. None of this group is Runic, but distorted and inverted Latin or Roman, corresponding to the present English.

The Sagas state that Thorfin about the year 1,000 A. D. left Iceland with 160 persons. It is also recorded that Thorhall had (9) followers in an expedition to the Western continent. Magnusen reads the figures I have attempted to describe, CXXXI, to mean in Roman numerals 151. By adding Thorhalls (9) nine to this number it corresponds exactly to the Sagas, and Thorfin's party of 160. Mr. Schoolcraft claims that the C before the three X's is not different from the I which follows them.

Below the above but to the right, are the following figures. A very good English capital R followed by an imperfect F, an I without the bars, an N, in the same condition; and a Z. Next preceding the R is a diamond or lozenge shapen figure attached below to a long crooked flourish, which the interpreters regard as the ship in which Thorfin navigated the northern seas. The lozenge part they regard as an O, the whole spelling OREFINS. To make Thorfin or Thorfins of these letters, a Danish diphthong "Th," is presumed to have been there and to have been obliterated. Capt. Eastman's sketch of this rock in Schoolcraft, is no doubt the most reliable of all.

On this the Runic "M" which is the basis of Prof. Magnusen's thesis, is not to be found. Of Thorfin there is only the lozenge and an English R. In the space assigned to the remainder of that name Mr. Schoolcraft has three characters, much like some of those on the Grave Creek stone.

In the Danish interpretation there is directly beneath "Thorfin" the figure of a "Sitting Bull" which is regarded as an Icelandic emblem of power and occupation. In some of the other figures they see Gudrida the wife of Thorfin holding the keys of her house, with Snorre their child. Also a rooster and Thorfin in his armor defending himself against the Skrellings or Esquimaux. This is called scientific investigation.

Thorfin is presumed to have written in mixed Runic or Latin characters, but principally in grotesque pictures, such as the North American Indians use everywhere. By far the largest part of the inscription, and two English W's in different portions of the rock are ignored. Recently the Danish society of Antiquarians at Copenhagen requested permission to remove this boulder to that city. The archaeologists of Boston at first objected to its being

removed. On mature investigation, they concluded that there is so little to justify the Runic interpretation, that this inscription possesses no more value than hundreds of others in our country. Mr. Schoolcraft by the help of a Chippeway of Sault St. Marys seems to have settled the same question in the same way, a quarter of a century since.

The Arabic, Latin and Greek letters interspersed through the North American inscriptions are as good as the Runic. To admit the use of any of them for the purpose of writing, presupposes among the inscribers a knowledge not of one but of many alphabets of the old world. Persons in our era who possess this knowledge have never undertaken to write in this way, and if they should it could be only read as a cypher, the key to which must be furnished by the writer.

For the benefit of those who wish to pursue the study of rock inscriptions here, I give the location of a number of them which are easily accessible. Very few have been copied with that care, which is necessary to a satisfactory discussion of the subject.

More thorough researches would disclose them by hundreds, in neglected ravines; where there are rocky faces, precipitous walls or large boulders.

Localities of Inscribed Rocks.

1. On the Allegheny River, in Pennsylvania, not far from Brady's Bend, formerly known as the "God Rock." The rock is a grit of the coal series. Noticed by Celoron 1749, and drawn by Capt. Eastman for Schoolcraft.

2. One mile above Wellsville on the Ohio River, north shore, upon a flat surface of grit covered at high water—wrought in double channels by a pointed tool, like a pick.

3. South shore of the Ohio, 4 miles above Steubenville, on sandstone—wrought with a pointed tool, effigies of turtles, snakes, tracks of quadrupeds, and human feet, also a circle with rays—(see Squire's Ancient Monuments, &c., p. 206.)

4. Nearly opposite the mouth of "Wheeling Creek," below Wheeling City, on the north bank of the Ohio—(Lewis Evan's map of 1755 "Antique Sculptures.")

5. Sixteen miles up the Guyandotte River—in Cabell county, West Virginia, there are a number of groups sketched by Squire:—all on blocks of coal grit, (see fig. 200 to 207 Ancient Monuments, etc.)

One represents a woman; also bird tracks, wolf tracks, Buffalo tracks, etc—

Fig. 201 shows a man apparently an European, bird tracks or spear heads, human faces, and animals.

Fig. 202, an eagle and another bird.

Fig. 203, Men, Women and animals.

Fig. 204, Wolf tracks, bird tracks, human faces, deer or buffalo tracks, and the outstretched skin of an animal.

Fig. 205. Head and shoulders of an elk, with a spear head, and circular holes. All these figures are wrought in with a pick or pointed tool—some of them 3-4 of an inch deep.

6. On Elk River, near Charleston, West Virginia.

7. At Catlettsburg, Kentucky, near the mouth of Big Sandy on the Ohio—now obliterated.

8. Near Burlington, Lawrence county, O., on the north side of the Ohio, 3 miles above.

9. Near Hanging Rock, on the River, Lawrence Co., Ohio.

10. A Colossal human head, on a flat rock, only visible at low water; a few miles above Portsmouth, Ohio.

11. "Turkey foot Rock"—Maumee City, Lucas county, Ohio., on a block of limestone, at the foot of the rapids.

12. Kelley's Island, near the landing, south side, on a block of limestone.

Sketched by *Capt. Seth Eastman, U. S. A.* in Schoolcraft, Part 2nd—plate 42—page 87. A fac-simile in plaster 1-12 of nature by Dr. E. Sterling, is now in our museum.

13. On a boulder of quartzose Granite, north side of Kelley's Island, sketched by *Capt. Eastman*; Schoolcraft—Part 2nd, plate 40, page 88.

The channels are shallow, and the effigies very indistinct.

Since they were cut the boulder has been undermined by the waves, and now lies in the water.

Prof. Frank H. Bradley of the East Tennessee University of Knoxville reports a number of effigies at "Track Rock Gap" near the head of the Hiwassee River, Union county, Georgia.

In Forsyth county, Georgia; there is a sculptured boulder of granite; the channels $\frac{1}{2}$ to $\frac{3}{4}$ of an inch deep. The figures are principally double circles, with a dot in the center; reputed to be the work of the Cherokees. (Col. C. C. Jones.)

On many rock surfaces in the mountains of North Western Georgia ancient sculptures are reported.

Also on Rock Castle Creek—a tributary of the upper Cumberland River in Kentucky.

Besides the now famous Dighton Rock and also at Portsmouth, Rhode Island, there are others in New England, one of which is at, or near Taunton, Massachusetts.

Mr. Schoolcraft considers them all to be the work of the red man, whose ancestors he regards as the Mound builders.

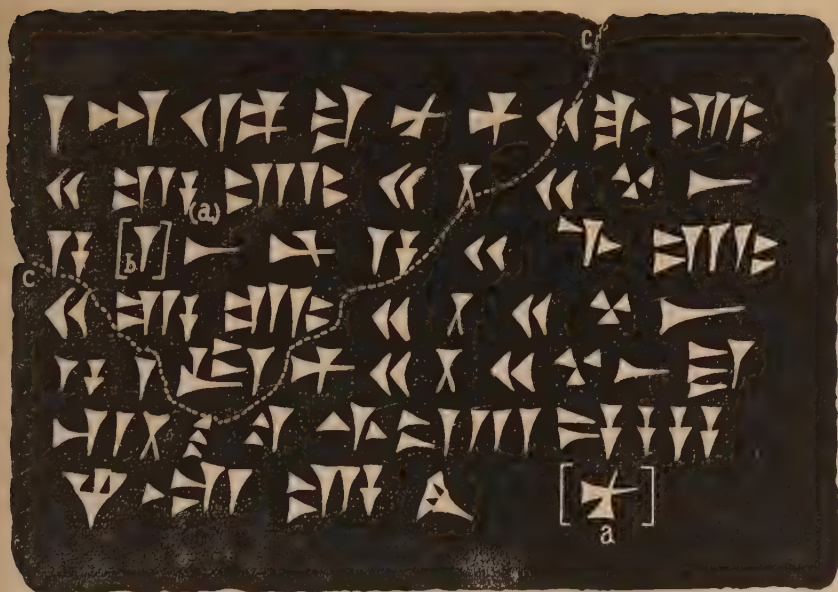
The most authentic copies of the Dighton Rock inscriptions, when compared with that on the South shore of Kelley's Island, disclose a very close similarity.

The best preserved and best described intaglios of the Ohio Valley, have so close a resemblance to both of the above, as to indicate the use of a similar and wide spread picture language in North America.

ANCIENT BRICKS FROM BABYLON AND CALAH.

Mr. W. P. Fogg brought for our Museum in 1874 a portion of a brick from the ruins of Babylon, on which is the regal stamp of Nebuchadnezzar. It is ($12\frac{1}{2}$) twelve and one half inches long, (8) three inches thick, the width in part wanting, but apparently about the same as the length, forming a square. Nebuchadnezzar's card, embracing his various high sounding titles, is impressed upon the brick by a die or stamp near the centre of its upper face, and is 4 inches by 6. On the underside is the black bituminous mortar still adhering. The material is the river loam of the Euphrates, very similar to that of the Ohio, through which cut straw was plentifully distributed. There is considerable alkaline efflorescence on the surface of the brick. It has been slightly burned or baked; and is of a grayish brown color inclining to red. The other brick is labeled "from the ruins of Nineveh," and is not as complete, but is more ancient. The inscription covers nearly all the upper face, and is made by a tool with a triangular point, striking upon the soft surface, before it was calcined. We have less than half of it, but the dimensions were about ($12\frac{1}{2}$) twelve and one half by ($8\frac{1}{2}$) eight and one half inches, with a thickness of ($4\frac{1}{2}$) four and one half inches. It is more thoroughly burned than the one from Babylon, and of redder color; the material also river loam, mixed with straw.

When the Rev. Selah Merrill, Archeologist to the American Survey of Palestine, was here in February 1878, he read that portion of the inscription which is left, without difficulty. He has access to a more perfect brick of the same era, and of which he has given a copy in the original cuneiform, the transliteration, in our letters; and a full translation in English. There are six lines and half of another, of which we have the portion indicated by the dotted line c, c enclosing the upper left hand corner of our engraving. At "a" is a character on our brick that is wanting in the Andover specimen, which we insert in a bracket. Another character "b" is wanting in ours. The letters cover nearly all the face of the brick, the margin of which in the engraving is slightly out of proportion.



LETTER OF DR. MERRILL.

Andover, Mass., March 19, 1878.

Dear Sir :

I have not forgotten my promise about the brick, but have not had time since my return until now to get at it. The brick is from Calah.* Three kings are mentioned on it in the order of their succession, whose reigns extended from 891 B. C. to 824 B. C. I have restored the cuneiform characters, given a transliteration and a translation. The brick belongs to Shalmanezzer I, who, "during his first twelve years resided at the city of Nineveh, and there he made additions to the palace, which had been rebuilt by his father, and adorned the temple of Ishtar the goddess of the city. Somewhere about his thirteenth year Shalmanezzer changed his capital, and went to reside at Calah, where he ruled for the rest of his life. At Calah he built a new palace south of the one raised by his father, and he completed the building of the city and raising of the walls. At the northern corner of the palace platform at Calah, near the temples, he built an enormous tower or zigurat, 167 feet in length and breadth, faced with stone to the height of 20 feet, and still standing 140 feet high." See *George Smith*,

*Calah was situated upon the Tigris on the right bank about 60 miles below Nineveh.

"*History of Assyria*," p. 60. I think I will send this without waiting to get the characters, etc., ready, of which I spoke.

I would like to have you call Mr. Fogg's attention to this matter, with my compliments.

With kind regards, yours sincerely,

SELAH MERRILL.

TRANSLITERATION.

di ma nu bar sar rab u
 sar dan u sar kissat sar mat assur
 pal-assur nazir pal sar rab u
 sar dan u sar kissat sar mat assur
 pal-tuklat adar sar kissat sar mat assur ma
 ri zip tu ziggurat
 sa er kal hi

TRANSLATION.

Shalmanezzer the great king, the mighty king, king of nations, king of the country of Assyria ; son of Assurnazirpal the great king, the mighty king, king of nations, king of the country of Assyria, Son of Tuklat Adar, king of nations, king of the country of Assyria, also builder of the tower of the city of Calah.

Tuklat Adar, B. C., 889-885. Assur-nazirpal, B. C., 885-860. Shalmanezzer I, B. C., 859-824.



Western Reserve and Northern Ohio HISTORICAL SOCIETY.

NUMBER FORTY-THREE—MAY, 1878.

PROCEEDINGS AT THE ANNUAL MEETING FOR 1878—TENTH ANNUAL REPORT—BIOGRAPHICAL SKETCHES.

The annual meeting of the Western Reserve and Northern Ohio Historical Society was held at the rooms Tuesday evening, May 14th, 1878, Colonel Charles Whittlesey, president, in the chair.

The annual report was presented by the secretary.

ANNUAL REPORT.

The past year has been a busy one for our society. The public interest in such matters as we represent has increased much, and, although the "hard times" have not added to our pecuniary wealth, the community has thoroughly appreciated what our society has been and is doing.

THE LIBRARY

has received considerable addition, nearly all by donation. The volumes added are 727 bound volumes and 800 pamphlets, making in the library:

bound volumes.....	4,234
pamphlets, including stitched volumes of	
newspapers.....	4,998
bound and other manuscripts.....	178
crap books.....	52
	9,462

THE CATALOGUE

is written and proves a great convenience in knowing what is in the library, although the systematic arrangement of the library has proved to be so successful that when once a book is known to be in the library the librarian can at once lay hands upon it without reference to the catalogue.

As systematic lists as were practicable have been made of the

PUBLICATIONS OF THE STATE,

city, and United States. In January last there was issued a brief card of our wants in State publications. It has resulted in adding some 20 volumes, largely through the kindness of Hon. R. M. Stimson, of Columbus. The circular is already out of date. A view of our shelves shows that we already suffer again for want of room.

The trustees of the Case Library contemplate giving separate room in their building and classification to their

UNITED STATES DOCUMENTS, and the Cleveland Law Library have suggested the massing there of the public collections of the city, to be further made as complete as practicable. It is suggested that although a few documents are of very little value, a library of them as large as may be expected will be very useful for reference. The Case Library has a large collection. It is perhaps worth while to consider whether a considerable share of our own United States publications had not best be there deposited.

We need the room, and a catalogue in our rooms of a collection somewhat complete deposited in a building so near by would really be worth more for historical access than so incomplete a collection as can be stored in our own rooms. The matter should be determined at once.

That part of our library relating to

GENEALOGY

has been in special request, and many people have been delighted to find how easy it is to know something of their individual ancestors. One of our members, Sam. Briggs, has issued during the year "A Partial Record of the Descendants of Walter Briggs," a privately printed book, beautifully done in our own city. The book is highly spoken of in the Eastern genealogical magazines as an accurate and careful work, and is handsomely noticed in the "Genealogist," a magazine published in London.

Our rooms have been considerably visited by persons interested in

LOCAL HISTORY.

The history of several counties is in preparation. Among them our own is contemplated by an Eastern publishing house and all who can should take pains to make it as full and interesting as can be.

THE TRACTS

published this year have been:
No. 37. Annual report for 1876-7, with obitu-

aries and a letter from Hon. John R. Bartlett, of Providence, relating to Early Maps.

No. 38. Discovery of the Ohio River by La Salle in 1669-70, by Colonel Charles Whittlesey.

No. 39. Autograph Letters.

No. 40. The Iroquois in Ohio, by C. C. Baldwin.

No. 41. Ancient Earthworks of Northern Ohio, by President Whittlesey, with illustrations.

No. 42. Rock Inscriptions in the United States and Ancient Alphabets of Asia, by President Whittlesey, with illustrations.

These pamphlets commence a new volume and are paged continuously to fifty-six pages. Two are copiously illustrated and, with all the others of our tracts which relate to archaeology, are in especial request.

There have been also reprinted with the kind assistance of Mr. Fogg:

No. 1. Battle of Frenchtown, January, 1813, by Rev. Thomas P. Dudley.

No. 2. Judges of the Supreme Court of Ohio in 1803-1854, by A. T. Goodman.

No. 4. First White Child in Ohio, by A. T. Goodman.

These were entirely out of print. All the above tracts will be delivered to any of our members who may request it.

THE MUSEUM

has received some considerable donations.

ANCIENT PUEBLOS OF THE ROCKY MOUNTAINS.

Among the models exhibited at Philadelphia were a number representing in miniature the dwellings of the Indians of New Mexico and Arizona. Most of them are in ruins, but they were occupied when the Spaniards conquered the country in 1540. These models are made by the United States Geological and Geographical Survey under Professor F. V. Hayden, and represent on a small scale in plaster the dwellings and ruins in fac simile, both as to color and surroundings. Quite unexpectedly to us a gentleman of this city presented the society with seven of these models, which were at once mounted on tables or standing cases. There is also one of the country embracing the Yellowstone Park and its geysers, on a scale of (2) two inches to the mile, showing topographically about seventy miles by eighty. Only the geysers whose spouting height exceeds 100 feet are designated on it. They are scattered through the valleys of the Rocky Mountain water-shed, on the heads of the Yellowstone, the Madison, and Lewis rivers. All the sculpturing and modeling is done by Mr. W. H. Holmes and Mr. W. H. Jackson, assistants on Professor Hayden's survey, after personal inspection and study of the scenes and ruins. Of the latter the most interesting are those on the Mancos and Chelly rivers in Arizona. They are situated high up the rocky cliffs of the valley, in rock shelters that it is now nearly impossible to reach, several hundred feet above the low lands. Some have the remains of steps cut in the rocks; others appear to have been reached by a series of ladders. Three of these ancient cliff houses or forts are in the canon of the Chelly. There are no remains of chimneys, but there are signs

of smoke over the [port holes that served as doors or places of entrance, high above the base of the structure.

The one on the Rio Mancos is like the others. There is also a round tower of finely-cut stones, with a concentric circle eight feet inside of the outer one, and between the two are fourteen cells, that appear to have had communication by small rectangular holes. No entrances are visible from the outside. Nor is it known precisely for what purpose the towers were built. In some of the ruined cities there are three circular towers, all with a depression at the center. They are thought to have been council chambers.

Taos, in New Mexico, is one of these towns modernized. All the tenements are on one pattern, a series of adobe boxes set upon each other three and four stories high.

Another model represents a Moqui village of Tegua, in Arizona. It is situated upon the point of a bare cliff without trees or water, and is strictly inaccessible to a foe. It is now occupied by these Indians, who do not appear to have made any change since their discovery by the Spaniards. No entrances are to be seen in the lower story. The second and third could be reached only by ladders, of which one stands against each compartment. A more dreary and uncomfortable mode of living cannot be imagined. No provision for water or fires, but only for safety. They are more like barracks or fortresses than dwellings. Water is brought and stored in earthen jars, jugs, pitchers and bottles of all sizes, from a quart to one-half barrel. There are models of seventeen forms of this pottery very much modernized. It is ornamented in a rude way with colors, and is made in the form of grotesque animals and birds.

LORAIN COUNTY

has done herself honor. Mr. D. C. Baldwin, of Elyria, has been engaged for some time in making a collection, which represents much and fortunate labor of his own, and many gifts from others, whose names will be found appended to this report. There are a large number of bone implements, generally rare in Ohio. These are of unusual interest to scientific men. Mr. Baldwin presented to the society the case in which they are contained. In addition to our special acknowledgments of last year, it is well to add that the contributions of William Hoyle represents all that remains of an early collection made by that old citizen of Elyria, Dr. E. W. Hubbard. Mr. Baldwin has gone abroad, and more extended notice of this case is postponed.

Other gentlemen whose gifts and services are of special value, are the Messrs. James and Joseph Worden, of Lake county, and J. L. Cole, of Lorain.

THE COINS

continue to attract much attention. The coin committee wishes to know if there is not some gentleman specially interested in that subject who would like to help him purchase some specimens to complete his set.

THE AUTOGRAPHS

need a kindly hand to arrange them. They are many and valuable if they were systematically

possible. The late H. B. Tuttle had it in contemplation to render us this service, but the will of God was otherwise.

THE NUMBER OF VISITORS

Last year was 4,272.

THE MEMBERSHIP

has been increased by one life member, and the money devoted to furniture. The collection of annual dues has been placed in the hands of the librarian, with a marked increase in efficiency over the desultory service of that kind heretofore rendered by the secretary, whose days are busy.

FINANCE.

Funds on hand last year were.....	\$ 53
Receipts have been, interest.....	692 10
Annual membership.....	306 50
Life membership.....	100 00
Miscellaneous.....	6 10
Total.....	\$1,105 23
Expended.....	1,061 07

Balance on hand.....\$ 44 16
Of the expenses, furniture accounts is \$357.63 including new chandeliers, cases and bookcases, for which a friend had last year advanced money.

The librarian's salary and copying is \$240; there was expended for books, \$122; printing and engraving, \$139; balance in rent of store room, coal, care of room, postage, express, and other miscellaneous expenses.

It is a painful duty to add obituaries of our deceased members, Dr. Jared P. Kirtland, L. B. of Rockport; Judge William G. Lane, Sandusky; Hon. R. W. Taylor, of Youngs- town, and H. B. Tuttle, Esq., of this city. That Mr. Taylor is kindly furnished us by John Edwards, secretary of the Mahoning Val- Historical Society.

Within a few days we have notice of the death of C. H. Mitchener, Esq., of Tuscarawas county, who has well served his State in his valuable book, "Ohio Annals." We have no material for any notice of his life.

IN CONCLUSION

We wish to exhort all to help the society a little to its museum, library, or funds. What we are largely from single donations. A single copy of a single book or pamphlet, or even a newspaper with a local article, is of value, and its systematic place.

Respectfully submitted,
C. C. BALDWIN,
Secretary.

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Local History—C. C. Baldwin, L. F. Bauder, Genealogy—S. Briggs, S. O. Griswold, P. Thatcher, H. G. Cleveland.

Coins—H. N. Johnson.

Autographs and Manuscript—H. L. Robinson.

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Term expires in 1880—H. N. Johnson, D. P. Eells, G. E. Herrick.

Term expires in 1881—C. C. Baldwin, G. H. Stone, L. Little.

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BIOGRAPHICAL SKETCHES.

Dr. J. P. Kirtland.

Jared Potter Kirtland, M. D., LL. D., a life member of this society, died on the 10th of December, 1877, at the unusual age of eighty-four years and one month.

As an antiquarian and a local historian, Dr. Kirtland has been of constant service to this society, from the time of our organization. His principal fame, however, rests upon discoveries in natural science. During more than half a century he applied himself to investigations in all branches of natural history with such success that his name stands among naturalists with those of Cuvier and Agassiz. But his wonderful powers of observation were not confined to animals and plants. His studies embraced general and local history. His capacious memory enabled him to retain clearly all such subjects among the throng of ideas which enriched his mind. In 1875 his life-long friend, naturalist, and artist, Dr. Garlick, executed for this society, as a labor of gratitude and love, a plaster bust of Dr. Kirtland. It is from a mold of the face and chest, taken a quarter of a century since, retouched by recent sittings. It is regarded by those who remember his features at that time, while yet in the full vigor of life, as a perfect likeness of the head, face, and chest of the greatest Ohio naturalist. This is an art treasure, which has become more precious by his decrease.

We do not intend to give a general eulogium. But are happy to allow his artist friend to exhibit the kindly and even affectionate relations which existed between them.

Letter of Dr. Theodatus Garlick.

BEDFORD, O., Jan. 20, 1878.

Colonel Charles Whittlesey:

MY DEAR SIR—By the promptings of my own heart, as well as by a suggestion from you, I am induced to give a brief history of my long, al-

most life-long acquaintance with the dearest and best friend I ever had—the late Doctor Kirtland.

It was my good fortune to become acquainted with him nearly fifty years since, in 1830, when I was a medical student in Brookfield, Trumbull county, O., about eighteen miles north from Poland, then the home of our departed friend. All I then knew of him was that he was regarded by the medical men in that part of our State as the best informed medical man on the Western Reserve, or even in the State of Ohio. At that time there was prevailing in Trumbull and some of the adjacent counties a malignant form of typhoid fever. He was then actively engaged in the practice of medicine. Besides attending to his own patients, which were numerous, he was frequently called in consultation by other physicians. Of course I did not know much of him at that time, except what I learned from my preceptor, Dr. Elijah Flower, and other prominent physicians.

Soon after I graduated in 1834 I located in the village of Youngstown, and thus became a neighbor of his, being only five or six miles from Poland. Very soon after this our intimacy commenced, and continued, not only unabated, but increasing, until his death. At the time I settled in Youngstown Dr. Kirtland was still engaged in the practice of medicine, and in addition to this he was widely known as a horticulturalist and florist. He was also engaged in investigating our fresh water shells, and birds, and was widely known as a naturalist. He also worked and managed a farm. It will to many be a mystery how he accomplished such an amount of work even in a life of eighty-four years, but to me it is no mystery. With him time was more precious than gold; neither of which he squandered. He made his amusements contribute to his vast fund of knowledge. Aside from his untiring industry he possessed a remarkable physical organization which was never abused, except, possibly, by

over-work. His chest was large, with plenty of room for his great heart and lungs to work in, which were located near his brain, his neck being short, consequently his brain was active, and he could accomplish an amount of brain work that very few men could.

Only his intimate friends know, or ever will know the amount of work he did, both mental and physical, and did it well. He delivered twenty-six full courses of lectures on the theory and practice of medicine, five at the Ohio Medical College, at Cincinnati; one at the Medical College, at Willoughby, and twenty at the Cleveland Medical College. At the time he filled the chair of Theory and Practice in the Ohio Medical College at Cincinnati, it was usual for him to drop me a line a few days before leaving home, inviting me to spend a day and take dinner with him. I do not now recollect that I ever failed to go, and I remember well that I rarely reached my home before midnight, not only dining with him, but staying till long after supper. The subjects of conversation were various, but chiefly on natural sciences, always left unfinished, to be taken up again the following year.

I need not tell you, who knew him so well, that these visits were a source of extreme pleasure and profit to me, in fact the beginning of what little I know of the natural sciences. I have no doubt his principal object was to enlist me in the study of natural history, as he did many other young men, some of whom became distinguished as naturalists. He soon set me at work on our fresh water shells, fishes, and birds. After I removed to Cleveland he enlisted me in botany, and never let up on me, nor himself either, but continued to work until "his fingers stiffened in death." This is literally true as some of his last letters to me will show. For the last thirteen years, hardly a week elapsed that letters did not pass between us. Sometimes I would receive three in one week, with from four to six closely written pages. During all this time he visited me very often, for as you well know I have been an invalid nearly thirteen years. His kindness to me and my family during this long illness has been unremitting. I cannot fully express how much I am indebted to that good man, or what cause I have to love and revere his memory. This kindness of heart was not limited to a few persons. He was extensively known over a large region by the common people, by whom he was loved and respected. Social and kind to all, popular with old and young, he seemed to be happiest when making others happy. He cultivated a taste for the beautiful by distributing liberally from his greenhouse rare and costly plants, as my own dooryard and those of my neighbors bear witness. Though so extensively honored and beloved I think he made few confidential friends. If he did I never knew it. The late John Kirkpatrick was one of his confidential friends and a person whom he both loved and respected. I know of no others unless it be myself.

In one of your late letters to me you inquired "what were his religious views?" He was a hearty and sincere believer in the Christian religion. He accepted the New Testament

as a revelation from God, though he did not attach himself to any church, adopting no particular form of creed, but a broad and liberal view as to man's religious duties. I infer that he believed that he who served the interests of his fellow creatures best served God best. He was beyond all doubt friendly to all Protestant churches. I could not engage him in a religious discussion, though I tried it several times.

His life was a beautiful example of man's duty to himself, and to his fellow beings. I did not see him during his last illness for I was too ill myself, but we corresponded until a short time before his departure. I need say but little more. To show you the state of his mind as he approached the end of this mortal life I will, by permission, transcribe some of his last letters to me.

"EAST ROCKPORT, O., Oct. 9, 1877.

T. Garlick, M. D. My Dear Friend:

This is probably my last letter. I am suffering much, and very feeble, but go in peace with my Creator and with all my fellow mortals. Kindest regards to your family circle. Farewell. J. P. KIRTLAND."

I replied expressing a hope that he would get better, and we continued to correspond, his letters being very brief. Soon after he wrote: "I have lost much strength; am daily growing weaker; how long I can continue is doubtful, but the great change is near at hand. Very truly yours. Love to all friends."

On the 11th of October he writes: "Yesterday I was eighty-four years old. A number of friends called, but I was too feeble to see any of them till Mr. Cutter and family called in the afternoon. Too feeble to write more."

I received several letters of like character until the 13th of November, when he wrote me his truly farewell letter, which I here transcribe:

"EAST ROCKPORT, Nov. 13, 1877.

MY DEAR FRIEND: No news. Everyday growing weaker. My family all attention—kindly watching over me night and day with more anxiety than I feel myself. The great change must soon occur. I have full faith in the Christian hope of a future life, but in what form we are to exist we know not. On the mercies of a kind Providence, who created me, who has sustained and helped me through a long life, I rely with a firm faith and hope. We know not what is beyond the grave. Vast multitudes have gone there before us. Love to all. Fare thee well."

I requested Charles Pease, Esq., his son-in-law, to drop me postal cards daily, letting me know his condition, which he did. December 2d, he writes, "Doctor Kirtland is gradually losing strength." On the 3d, "Dr. Kirtland has failed rapidly during the last forty-eight hours." December 4th, "The Doctor spent a restless night—mind generally clear." On the 5th, "Dr. Kirtland passed another uncomfortable night, failing gradually; probably will not last another day." I received one or two other notes of like character, and on the 8th of December, "Very little change in the last forty-eight hours; growing weaker; says nothing but yes or no to questions; seems perfectly conscious;

suffers much more I think from extreme weariness than acute pain. On December 10th I received a telegram from Mr. Pease that he had passed away. Thus rose to the higher life not only my best friend, but the best man I have ever known. So long as he lived he never considered his work done. He appeared to regard the command given to Adam by his Creator and Master "to dress the garden" as applicable to himself.

I think Dr. K. possessed more good and useful traits of character than any person that I was ever acquainted with—so unselfish. If he came into possession of a new and rare fruit, or plant, his first thoughts were, that some one else should possess it also, and could not rest until others enjoyed them with him. Last spring he fairly robbed himself by cutting scions from a small, but a rare and new pear, and sent them to me, which I grafted on some of my trees. Last September he sent me buds from a rare peach tree that ripens its fruit in July. I set these buds on trees that I have, and mention these acts, as they show a beautiful trait in his character which was ever cropping out. He did not suppose that I would ever eat of these fruits, but some one would, which would be sufficient reward. It was literally true of him "that planting the pear and the peach was sweeter to him than to him that ate of the fruit." This continued to the last. The latter part of October he wrote me quite a long letter, and closed it by saying, "To you and me it is of no consequence, but every young fruit grower should know that the best fall apple for eating and cooking from December 1st to January 1st is the "Hubbardston Nonesuch." For the market, the best."

I can truthfully say that I have never known a person whom I believe more heartily desired to promote the happiness and welfare of his fellow-creatures than did this great and good man.

T. GARLICK.

Hon. William Griswold Lane.

Hon. William Griswold Lane, of Sandusky, a life member of our society, was born at Norwalk, O., February 12th, 1824. He was the son of the late Judge Ebenezer Lane, a sketch of whom appears in tract No. 2, reprinted the present year. He received every advantage in education at school, graduating at Yale in 1843. He then attended the law school at Harvard. In 1846 he went to Berlin, Germany, spending a year in the study of foreign law. He entered into practice in Sandusky with his father, the late Judge Stone, becoming after a member of the firm. His father went on to the Supreme Bench and Judge Stone to the Common Pleas Bench. Mr. Lane continued in active practice until February, 1873, when Judge Stone being elected to the Supreme Bench, he was elected to the Common Pleas judgeship left vacant. He occupied that position until his death in October, 1877. Mr. Lane was a gentleman whose ability, integrity, and purity were much respected in the community in which he lived. As a citizen he was patriotic and progressive, cheerful, social and companionable. He made excellent use of his unusual advantages, and was, as appears by the records of the court over which he had presided, one

of the most esteemed, high-minded, and scholarly members of his profession.

His life membership was first presented to him by a friend. He sent back a draft on New York for the amount of it, \$100. The draft reindorsed was returned to him with an explanation. He returned the draft again reindorsed, with the wish to contribute that sum to our fund.

Hon. Robert W. Tayler.

Robert Walker Tayler, also a life member, was born in Harrisburg, Pa., November 9th, 1812, son of James and Jane (Walker) Tayler. The family (there were nine children) settled in Youngstown, O., in 1815. The children received a good education. Robert came early into public service, teaching in 1830 and 1831, next deputy clerk of the Common Pleas, then secretary in the assessment of real estate. He studied law with Hon. Elisha Whittlesey and Hon. Eben Newton, of Canfield, and was admitted in 1834. He practiced law in Youngstown with success, until he was elected Auditor of State. From 1839 to 1843 he was County Attorney. In 1850 he became cashier of the Mahoning County Bank with the agreement that he might also continue practice. In 1855, and again in 1857 he was elected State Senator, and while holding that office he was elected Auditor of State. He served in that office until the death of Elisha Whittlesey, First Comptroller of the United States Treasury, when at the suggestion of Salmon P. Chase, then Secretary, he was called by President Lincoln to the vacancy. This was in January, 1863, and the first knowledge he had of the matter was from the announcement in the papers while he was in New York paying the State interest. He first declined, but afterward accepted the appointment and continued in that post the honest and incorruptible watchman of the Treasury for nearly fifteen years, until his death. He was at work at his desk, February 25th, 1878, when he was stricken with paralysis and lived only two hours. At the time of Lincoln's assassination he had tendered his resignation. His office separated him from his family, which remained generally in Youngstown, and he wished to be there too. But he was persuaded to withdraw it. In his case the many and steady offices of trust he held are the best kind of testimony to the great respect in which he was held by all who knew him. He married, March 24th, 1840, Miss Louisa Maria, daughter of John E. Woodbridge, of Youngstown. They had seven children, three of whom survive. She died April 11th, 1853, and he married, January 12th, 1854, Miss Rachel Kirtland, daughter of Colonel Caleb W. Wick, of Youngstown. They also had seven children, of whom five survive.

Henry B. Tuttle.

Mr. Tuttle was born in Sandgate, Vt., 16th of September, 1817. He commenced business in Cleveland in 1851 as a commission merchant. He personally superintended the building of the first dock at Marquette, and did much to build up trade with that place. He was long agent of the Lake Superior Iron Company. For fifteen years before his death his firm of H. B.

Tuttle & Co. were large dealers in ore and pig iron. From the organization of this society he took a personal interest in our affairs. He was one of the earliest of our life members, and a frequent contributor to our museum. Although active in business he was a great reader and student, especially in botany and horticulture. He was a prominent worker in the benevolent enterprises of the city, to which he also gave liberally in money. Among these he was particularly devoted to the Bethel Home, on Superior street, of which he may be regarded as the founder. He was stricken down

instantly on the 9th of April, 1878, without warning and without a struggle. The public institutions of Cleveland have thus lost one of their most reliable supporters at a time when such support is particularly necessary. His leading characteristics were an active, unpretending, judicious benevolence, guided by a strict Christian standard. He was, in every sense, prepared for a sudden exit from this life. A friend who knew well his great purity of character, and his remarkable death, said it reminded of the Scripture, "He was not, for God took him."

Western Reserve and Northern Ohio HISTORICAL SOCIETY.

NUMBER FORTY-FOUR—APRIL, 1879.

THE GRAVE CREEK INSCRIBED STONE.

BY COL. CHAS. WHITTLESEY.

At the Cincinnati meeting of the Ohio State Archaeological Society in September 1877, a committee was appointed to report upon the genuineness of the Grave Creek stone. Mr. Wharton, one of its members, having asserted in the most positive manner that he was present when it was found, and that there could have been no deception practiced on him. The gentlemen comprising the committee have a thorough knowledge of what pertains to home archaeology. They are the Rev. J. B. McCrene, Hamilton, Ohio; A. E. A. Taylor, President of Wooster University, and Prof. M. C. Read, of Hudson College, Ohio. At the meeting of this society at Wooster, Ohio, in September, 1878, Prof. Read made an exhaustive report, including much new correspondence, the conclusions of which are against the genuineness of the inscription. It was concurred in by President Taylor, and has been printed in the January number of the *American Antiquarian*, Cleveland, Ohio.

In February, 1878, I received from Mr. R. W. Mercer, of Cincinnati, a well informed dealer in Western relics, a letter which states that Mr. Boreman, who for the past sixteen years has been postmaster at Parkersburg, in West Virginia, had recently told Mr. Mercer that he knew the man who made that tablet, and put it in the mound, while the excavation was going on. President I. W. Andrews, of Marietta College, near Parkersburg, on being informed of the above statement, visited Mr. Boreman at his home. His report of the interview is that it was not very explicit.

"Mr. Boreman, the Postmaster, knew the man who is supposed to have hoaxed Mr. Tomlinson, the owner of the mound. His name was David Gatewood, and lived near the mound at the time it was opened."

"Mr. B. is confident that some one told him that Gatewood admitted he cut the characters on the stone and threw it into the excavation while the men were away, but cannot recall the person who informed him." * * *

"I saw another gentleman who had some knowledge of the stone, but seemed to doubt whether there was anything more than suspicion to base the idea upon, and did not speak as he thought Gatewood admitted it."

Hitherto the doubts which have been thrown over this inscription were based entirely upon general conclusions. The direct proofs were all in favor of its antiquity. At least half a dozen persons of credibility have stated over their signatures that they believe it to be what Mr. Tomlinson claimed for it in 1842. More than one of them was present when it was first produced. They do not precisely agree in the details, but are as nearly in accord as is usual in such cases. But none of these witnesses had stated that they saw the stone imbedded in the undisturbed matrix of the mound. This main fact being wanting, there were so many improbabilities on the other side that Mr. Squier and Prof. Wilson were confident, thirty years since, that it is a fraud. The critical ability of Mr. Schoolcraft, who took the opposite ground, was not such as to give much weight to his opinion.

Messrs. Jomard, Schwab, Goppert and Bing, in Europe, appear to have relied upon Mr. Schoolcraft without further investigation. A majority of the "Americanistes," at their meetings in Nancy and at Luxembourg, regarded it as impossible that there should be any Semitic writings or inscriptions in America.

Prof. Leon de Rosny denied before the Con-

gress at Nancy (vol. 2, p. 81) that there is any evidence of a knowledge of writing in Ancient America on the phonetic or alphabetic system, in which he agrees with Humboldt and Klaproth. They regard the Mexican picture writing as originally a close resemblance to the modern rebus. Rosny discussed the Maya manuscripts, for which he denied any resemblance to either the cursive, abridged or demotic writings, of Africa and Asia. He says:

Of the Maya manuscripts there are three—1st, Codex of Dresden, written upon Agave tissue; 2d, in the Bibliothèque-National, found by me in 1859, called "Codex of Perez," or Perezione; 3d, the one of the Abbe de Brasseur de Bourbourg, who found at Madrid the manuscripts of Diego de Landa, the first Bishop of Yucatan. This embraces a sort of Maya alphabet, an almanac and a poem, but the Abbe's decipherment rests on nothing.

Herbert Bancroft and Mr. W. Balbouts take the same view. All attempts to read these manuscripts, in the opinion of M. Rosny, have failed. The only direct disclaimer of the Congress, as to the translation of Mr. Bing, will be found in a note on page 225, volume 2, in these words:

"The reader will find on page 130 two translations of the Grave Creek inscription, not having any relation to each other, and entirely different from that of Monsieur Bing." The first is by Mr. M. Schwab, and the second by Mr. Oppert. Messrs. Castelnau, Jomard Schwab, Oppert and Prof. Turner, of New York, consider it to be Phœnician, and therefore Semitic.

Prof. Paul Gaffarel, of Dijon, differs from them, and says (p. 130) very judiciously: "Few problems are more interesting to discuss, but before arriving at a conclusion more proofs and more solid arguments are necessary than we now have or probably ever shall have." Mr. Lucien Adams, remarking upon the paper of Hyde Clark, Vice President of the Anthropological Institute of London (Compte Rendu, vol. 1. p. 157), says:

"The Congress of Americanists has not alone the mission of illuminating the facts, on which we may erect theories with some degree of certainty; it should also defer to the examination of American scholars, those hasty systems of which in our times there is found too easy an acceptance in the common and the polemic world. The session at Nancy, signalized among the linguists the theory of Aryan races in Peru, which began to be diffused in Latin America and elsewhere. In the *Compte Rendu* of Luxembourg you will see a memoir of Mr. Henry, which does full justice to the chimera of an Indo-European language, through the dictionary, and of a poly-synthetic through grammar. The same congress had invited archaeologists, to examine very closely the pretended Semitic inscriptions, which come to us from time to time from a country where it appears the celebrated mystifier Barnum has a school. Col. Whittlesey has responded to this appeal by a brochure which has the significant title of "Archæological Frauds."

In August, 1878, I visited Moundville and the great mound, where several people are yet living who saw it opened in 1838. One of

the horses which drew the omnibus from the depot to the hotel, was said to have been recently exhumed from the mound. He had fallen into the shaft, which is still in good condition. Being evidently alive, the old adit on the north side was cleaned out, and the animal rescued through it very little injured. I now give the information procured at Moundville.

CONVERSATION WITH MR. P. B. CATLETT.

Mr. Catlett appeared to be about seventy years old, his mind and physical constitution as good as usual with men of his age. He said:

"I was in the adit the day the stone was found with hieroglyphics on it. One man came out with a wheelbarrow load of earth and dumped it on the pile. Then another man came out and dumped another barrow load in the same place. I was looking about the pile and was the first who saw the stone and took it in my hands. The upper vault had fallen in, and Mr. Tomlinson thought that it came from the upper vault, but I thought that it came from the lower one."

"David Gatewood was a plasterer, and plastered the room which Mr. Tomlinson made at the center of the mound. He did not live here very long. I worked for Tomlinson in the adit and the room. I afterwards kept the room in which the relics were placed. Many of them were lost. Mr. T. did not pay much attention to them. Most of them were carried away, and the roof fell in. A part of one of the skeletons is there yet. The shaft is still good, being walled with brick. The upper vault fell in after we reached the center of the mound."

Mrs. Richard Paul, of Moundville, is a daughter of David Gatewood. She states that she has heard her father speak about these relics, but she was then a small girl and remembers nothing which he said in particular. He soon after moved away and died at Reedsville, Ohio.

Mrs. Alston lives at Moundville. She is a widow, and sister of Mrs. Paul. She states that her father died about fourteen (14) and her mother four (4) years since. Heard her mother talk about the stone, but remembers nothing, as she was very young.

It must be admitted that the proof is not conclusive against Gatewood, and amounts to little more than suspicion. I agree with Prof. Read that the characters on the stone by whomsoever they were cut, are *not* alphabetical or phonetic. If they have any meaning and are not a mere jumble of characters they must be symbolic or picture writing. It is therefore of small consequence whether the stone is antique or modern, whether it is genuine or a fraud.

In my remarks upon the translation by Monsieur Levy Bing, I quoted a rendering of it made by Mr. M. Schwab, who attended the congress at Luxembourg, as a representative of the Philological Society of Paris. He is a profound scholar in languages, and brought to Luxembourg a treatise upon the Grave Creek Stone, where he first saw my criticism upon its genuineness. On seeing this he declined to read his paper but requested the committee on publication, to insert it in their *Compte-Rendu*. This was not done.

and its contents which must be valuable and recondite have not yet transpired.

At the sitting of September 12, 1877, he made the following remarks, for the translation of which I am indebted to Mrs. C. C. Baldwin, of this city:

"As to myself truth obliges me to confess ignorance of what pertains to America. I am thoroughly Hebrew; therefore it was of an inscription given out to be Phœnician, by those who discovered it, that I prepared to treat before you. But only yesterday I had knowledge of a brochure by Colonel Whittlesey on "archæological frauds" in the United States, and I acknowledge that the reading of this document gives rise in my mind to the gravest doubts.

On the testimony of an archæologist of merit (Mr. Schoolcraft, who has not doubted what Col. Whittlesey call the "genuineness" of the Grave Creek inscription; I undertook the decipherment of the stone eleven years since. Mr. Goppert has had the goodness to examine my efforts at a translation. I declare boldly that this illustrious linguist and paleographer, bestowed only a hasty examination, and took no decisive position upon either the authenticity or the interpretation of this stone. His high scientific responsibility is in no wise pledged in this discussion based upon the testimony of Mr. Schoolcraft, and without prejudice, whether the text was the work of a forger. Each one to his task. I am informed within twenty-four hours that three eminent archæologists, E. George Squier, Daniel Wilson and E. H. Davis, have returned a verdict absolutely negative, upon the authenticity of this stone. Under these circumstances I present you my hasty epitome which will convince you that it was ingenious in the forger to make a semitic inscription, but content myself with simply asking the publication of my memoir in the proceedings of this session."

After this very frank statement of Mr. Schwab, Mr. Lucien Adams, one of the leading members of Congress, made the following remarks:

"Mr. Schwab has demonstrated that true science is not overcome, by either doubts or self-love. I say boldly that after the declarations he has made, the question of the Grave Creek Stone is settled in the old world as well as in the new. I have, however, this duty, to disclaim all responsibility of the Congress at Nancy. In the brochure of which Mr. Schwab has spoken, Colonel W. implies that the members of that session, must have been convinced of the authenticity of this inscription as presented by Mr. L. Bing.

This eminent Americaniste will allow me to observe that the question of authenticity was not raised at Nancy, and that there is a note appended to the memoir of Mr. Bing by the Committee of Publication, which explains, in a very courteous but explicit manner, the opinion of the Congress. Since we are not compromised from the other side of the Atlantic, I declare in the name of the committee of the first session, that the Americanistes at Nancy, did not receive the version of Mr. Bing the authenticity of the inscription, or the presence on American soil, before Columbus, of the Semitic element."

To the remark of Mr. Adams respecting the note of the committee of publication I should state that I find one at the foot of page 192, Tome Second proceedings at Nancy; disclaiming for the congress any sanction for a supposed Hebrew inscription, copied in the Comptes-Rendu purporting to have been taken from a mound somewhere in Licking county, Ohio.

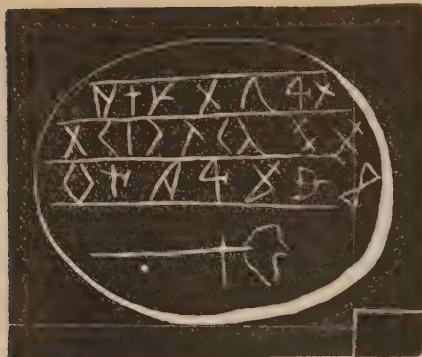
LUXEMBOURG MEETING, TOME 1—p. 170.
From remarks by Major De Helwald, of Austria.

"We must admit the investigations into the origin of American civilization, which have been during the two last sittings the principal object of our studies, do not furnish the critic with solid grounds by which it is possible to distinguish clearly truth from error. The question of this origin is particularly troublesome, although I think it not useless at this moment, where we hope to reach certain history, to endeavor to give an exact account of the results which we have obtained and of those we hope to obtain in the near future. This problem of origin, enveloped as it is in thick darkness, extends beyond the purposes of this Congress; in its programme on the study of American civilization. The ante-Columbian history of America, to use an expression I proposed at yesterday's sitting, embraces two distinct epochs. The first, that which immediately preceded the discovery, and which is supported by reliable documents, more or less authentic; but documents that may be used on condition they are submitted to severe criticism. The other and anterior epoch ascends even to the origin. It precedes the state of things of which we have a partial knowledge, which I will call historic.

Must I insist on the consideration that such a civilization as Europeans found in America, necessarily required centuries for its development? If we are asked for the duration of this epoch answer frankly, that we know very imperfectly and really not at all. However that may be, there is no doubt that as to the certain period we are on an ocean of hypotheses, floating according to every caprice. Hypotheses? How they surged about at Nancy, they are surging now at Luxembourg; and I apprehend they will continue to surge during the third session.

Permit me to request this Congress to restrain the growing studies relating to America, and confine them to questions where we can see clearly, or at least such as are amenable to fair criticism. Especially let us be skeptical, very skeptical, in the theories given in the Memoirs just read. I do not undertake to criticise those papers, but I must say that for the most part they contain only hypotheses with slight foundations. I do not absolutely deny the value of hypotheses, but in a science as young as ours it is necessary above all things to have a base upon which can be erected something durable."

Many copies of this stone, which for its diminutive size and the few characters upon it, has attained an undue notoriety, have been published during the past forty years. Most of them are carelessly made. The European discussions and translations are based upon imperfect copies, all of which were reproduced in our tract No. 33 for November, 1876,



I insert again the only correct copy made by Captain Eastman, United States Army, from the original in 1850, for "*Schoolcraft's Indian tribes.*" It is of the size of nature, a thin oval piece of sandstone; the back of which is blank.

If Professor Read and myself are right in our conclusions, that the figures are neither of the Runic, Phonician, Canaanite, Hebrew, Lybian, Celtic, or any other alphabet language, its importance has been greatly overrated.

Western Reserve and Northern Ohio HISTORICAL SOCIETY.

NUMBER FORTY-FIVE.

NUMISMATICS.—FACTS IN REGARD TO EARLY AMERICAN COINS.

PREPARED BY H. N. JOHNSON, IN CHARGE OF THE DEPARTMENT OF
NUMISMATICS.

The coins and paper issues of our Colonial times are interesting souvenirs of struggles for relief from poverty and oppression, and their legends and devices are often significant of the spirit of the people. The bitterness of party strife in the days of Jackson and Van Buren finds sententious record in the "hard times tokens" of those years and the little coppers issued to relieve the scarcity of change in the days of our rebellion are no contemptible memorials of uncompromising love for the Union, as well as of the necessities of trade. So in equal or lesser degree are interesting the specimens or the paper issues of the States and Nation from the earliest to the present time. To collect and preserve these, as well as the coins and medals of our own country, is the especial object of what is termed the coin department of our society, although it is not intended to neglect those of other nations. Concerning such American coins as the society is possessor of we propose to make brief mention.

MISCELLANEOUS COLONIALS.

The term "Colonials" as applied to coins includes in its general acceptance not only the coins issued for the use of or coined by the Colonies, or especially authorized by them, but also those coined by or in the different States of the Union subsequent to the revolution and before the establishment of the United States mint in Philadelphia. A full collection of these is seldom met with, as of some of them but very few exist on either side of the water.

First in order of date are the New England and Pine Tree shillings, a fac simile of the first and an original of the second being in our case. Prompted by the varying and uncertain values of the Spanish silver in

circulation, and the neglect of the mother country to provide a reliable and sufficient circulating medium, the Colonial Legislature of Massachusetts in 1650 provided for the issue of shilling, six-penny and three-penny pieces, but only the first two were issued, and made their appearance in 1652. They were plain planchets of silver with the letters N. E. stamped on one side, and the numerals XII. or VI. on the other. No sooner were they put in circulation than the simplicity of their device was seriously objected to, and the Legislature immediately, in the same year, changed the style and ordered that instead of N. E. on the obverse there should be a double ring enclosing a tree, with the inscription Massachusetts around it, and on the reverse New England, with the year of our Lord 1652, and the respective values XII., VI., III., II., I. The first three denominations were the only ones issued up to the year 1662, when the two-penny piece made its appearance. The one penny, it is believed, was never coined. These coins were issued from time to time without change of date till 1686, when the home Government forbid further coinage. Some of these pieces are known as Pine Tree and others as Oak Tree, from the form of the device.

The Carolina half-penny, or Carolina elephant, is represented by a copper electrype. The obverse is occupied by the effigy of an elephant, and the reverse by the inscription "God preserve Carolina and the Lords Proprietors," "1694." The original is brass and of extreme rarity. Its history and object is unknown, but whether an enterprise of the Lords Proprietors or of individuals, it was doubtless intended for a

circulating medium. The significance of the elephant is difficult to imagine, but certain it is the Lords Proprietors found, not a century after, the Carolinas an elephant on their hands.

In 1737 and 1739 there were coined by one Higley or Highley, of Granby, Conn., of pure copper, a large number of copper pieces of the size of a British half-penny, which now are known as the Higley or Granby coppers. It is said that by reason of the purity of the metal they were sought for and used by manufacturing jewelers, and that, and the fact that they wear easily, account for their great scarcity. A deer and the legend "Value me as you please" are the prominent features of the obverse, but some, instead of the above legend, have the word "Connecticut." Some reverses have three crowned sledge hammers, and the legend, "I am good copper" and the date, while others have a broad-ax instead of the hammers, and in some the date is wanting. The Society is fortunate in having an original of the ax and an electotype of the hammer type. It is alleged by some that Higley was a blacksmith, and afterward clouded his title to respectability by counterfeiting the coins of the realm, while others give him rank in the medical profession. Whoever he was, his title is clear to being the first coiner of copper coin in Connecticut.

In 1722 William Wood, in company with others, secured from the British Government a patent for coming for the use of the American Colonies what is now known as the Rosa Americana, and in that and the following two years many were issued, of the value of penny, half-penny and farthing. They are of bath metal, beautiful in device and execution, but did not prove a successful venture for the patentees. At the same time Wood had a similar patent for supplying Ireland with halfpennies and farthings, and this enterprise was also a failure. The Irish pieces are not Colonials, but because of their association through the patentee, with the Rosa Americana, they are commonly classed as such and find place in cabinets along with them. Several of both are in our cabinet, and among them a penny in fine preservation, the device of the obverse of which is a bust of George I. encircled by the words "Georgius D. G. Mag. Bri. Fra. et Hib. Rex," and that of the reverse is a crowned rose, and the words "Rosa Americana" "Utile Dulci" 1723.

In the reign of Louis XV., of France, copper pieces were issued for the Louisiana colony to be used in the payment of the King's troops and as a legal tender at the

Indian Company's stores. Crossed L's and the words "Sit nomen Domini benedictum" are upon one side, and on the other "Colonies Francoises," and the date, 1721 or 1722. In 1767 another copper was issued for like purpose, the device of which is a laurel wreath surmounted by a crown, and in the center an oval ring of dots enclosing three fleurs de lis, and the date, with the legend as above. Two sceptered fleurs de lis, the words "Colonies Francoises" and L. XV. Upon some the letters R. F. are stamped over the lilies, the meaning of which is yet a matter of conjecture. We have good specimens of each, except the date of 1721.

The name of Paul Revere, of patriotic fame, is associated with the brass piece known as the Pitt Token, he having originated and designed it. The bust of Pitt, "The restorer of Commerce," "No Stamps," "1766," the ship "America" under sail, and "Thanks to the friends of Liberty and Trade," are the devices and legends. It revives the memory of the famous stamp act passed by Parliament in 1765, and, through the energetic efforts of the great leader, repealed in 1766, and records the thankfulness of the colonists at their deliverance from a great burden.

The Virginia halfpenny is one of the finest coins issued for circulation in the Colonies. The bust of the King, and the legend "Georgius III. Rex" form the obverse, and a crowned shield impaling the arms of Scotland, France, Ireland and the electoral dominions, the word Virginia, and date 1773 are on the reverse. Some of these pieces were struck in silver, but only a copper one graces our cabinet.

Continental currency is the common name of a tin or white metal medal issued in 1776, a copy of which in white metal we have. The sun sending its rays upon a dial, on the left of which is the word "Fugio," and at the bottom, "Mind your business," all encircled by the words "Centennial Currency," and the date 1776 occupy the obverse. On the reverse are thirteen circles linked together so as to form a large circle, each of which is inscribed with the name of one of the States, and within this circle the words "American Congress," "We are one." The origin of this piece is not known, but it has its value as an embodiment of the patriotic sentiment of the year of the Declaration. It is of the size of the earlier dollars.

Subsequent to the Revolution there were many issues of tokens and patterns, as well as State coins, some the result of the necessities of the times for small change, and others the expression of ideas as to what our Government coin should be like. I

mention briefly those in our museum. The "Father of his Country" received due honor and his likeness appears on the "Unity" cent, the "double" cent, the two Washington and Independence coppers of 1783, the Liverpool halfpenny, the "Liberty and Security" and the big eagle cent of 1791. The last is said to be of American contrivance and execution, being made for a pattern piece under call of the Government for designs, but the others were made in England. It was the warmly expressed desire of many that the Government issues should bear his name and likeness, but the plan did not meet his approval, as it seemed to savor too much of an imitation of royalty, and his wishes controlled. The Nova Constellatio of 1783 and 1785, the Confederatio of 1785, the U. S. A. Bar cent, and the Immune Columbia of 1787 are among the most significant in their devices of the tokens, etc., of that day, and are eminently worthy of place in the historic relics of the rising Republic. The Mott token of 1789 was the first business token gotten up for this country, and was followed in 1794 and 1795 by that of Talbot, Allum & Lee, both business houses of New York City. The Confederation is represented in two varieties in our cabinet by electrotypes, and the others by originals. There is also an electrotpe of a copper piece with a bust of Liberty and the date 1792 on the obverse, and an eagle with outstretched wings standing upon the upper portion of a globe, and the words "United States of America" on the reverse. It was undoubtedly a pattern, but for what denomination is not known. The North American token of 1781, and "Ships, Colonies and Commerce" with the American flag, are commonly classed with colonials, without, however, so far as we know, any special reason therefor. The North American is claimed by some writers as Canadian, and the other, with the exception of the flag, is almost identical with a coin or token bearing the British flag, and always classed with the tokens of the present British North American colonies.

The want of a proper circulating medium was severely felt by the States after the Revolution, and Congress not providing relief the States of Connecticut, New Jersey, and Massachusetts, and the embryo State of Vermont, availed themselves of the right to coin money, there being no prohibition in the articles of Confederation to their doing so. These States, however, were modest in the matter, and, as did the Romans in their simpler days, found relief in copper. The probability then every day growing stronger that the weak confederacy would soon give way to a strong central government,

no doubt influenced them in resorting only to temporary expedients. The country, too, was poor, the habits plain, and the facilities of intercourse between different portions limited, so that the relative value and usefulness of the humble cent was much greater than now.

CONNECTICUT.

The Legislature of this State in 1785 granted to Samuel Bishop, Joseph Hopkins, James Hillhouse and John Goodrich the exclusive right to establish a mint and coin money. These men then formed a partnership with Pierpont Edwards, Jonathan Ingersoll, Abel Buell, and Elias Shipman, for carrying their permission into execution. Edwards, Shipman and Ingersoll in the following year sold their interest to James Jarvis, and afterward Mark Leavenworth became also a stockholder. It is stated that the operations of this company only covered three years, and yet it is certain there was a considerable issue bearing date 1788. It is also stated that in the last named year Major Eli Leavenworth coined coppers for Connecticut in the State of New York, but the statement, though it may be true, does not satisfactorily account for the large issue, and the supposition is that the coinage continued at the Connecticut mint, and though no record of the right to so coin is known to exist, it is probable that it was tacitly permitted by the authorities. These pieces, or Connecticut cents, as they are called, were to weigh forty to the pound, and it is known that during the first three years at least 28,944 pounds were coined. The device of the obverse is a bust, in coat of mail, or Roman tunic, with laureated head, and the legend is Auctori. Connec. Upon the reverse is a female seated on a globe, with a staff surmounted by a liberty cap in her left hand, and an olive branch in her right, and the legend Inde. et Lib., and the date. The coinage is rude, and the frequent changes of dies afford a great number of varieties. The general appearance of these coppers is that of a bungling imitation of the British halfpence of that period. The Society has specimens embracing all the dates and the most noted types and varieties. We have also another piece, known as the Auctori Plebis, bearing the date 1787, and classed among the Connecticut coins, but, we believe, wrongfully so. It is of better execution than any of the authorized Connecticut cents; has nothing in common with them, unless the device of the obverse be so considered, and the device of the reverse is identical with that of several English tokens, one of which we have. It is clear

to our mind that it is a token struck in England for American circulation.

NEW JERSEY.

In 1786 the Legislature of this State authorized a contract to be made with Walter Mould, Thomas Goadsley and Albion Cox, for striking \$10,000 worth of copper coin at the rate of fifteen to the shilling, each piece to weigh six pennyweights and six grains, being six grains heavier than the Connecticut. The Justice of the Supreme Court was to determine the device and inscription. Upon one side is a horse's head, a plough, the date and the words *Nova Caesarea*, the old name of the colony, and on the other a shield and the words *E Pluribus Unum*. The issues were in 1786-7-8. There are many varieties, the most notable of which we have.

MASSACHUSETTS.

This State, in 1786, decided to strike cents and half cents, and in the succeeding year Joshua Witherel was instructed to have the necessary buildings and machinery erected, and coins were issued bearing date 1787 and 1788. An eagle with a bundle of arrows in one talon and an olive branch in the other, and a shield on its breast on which is stamped the word cent, or half cent, all encircled with the word *Massachusetts*, occupy one side, and an Indian at full length, with bow and arrow, a star forward of his head, with the word *Commonwealth* on the margin, are found on the other. The device is taken from that of the old Colonial seal. Specimens of both dates of both cents and half cents are in our cabinet.

VERMONT.

This coinage has somewhat of a local interest, the coin being Reuben Harmon, Jr., of the town of Rupert, who, on his application, was authorized by the Legislature in 1785 to coin copper. He emigrated to the town of Weathersfield, Trumbull county, O., in the year 1800, and lived there till his death in 1806. He issued coins from his rural mint in 1785-6-7 and '8. That of 1785 has for its obverse the sun rising from behind a range of wooded mountains, a plow in the field beneath, and the legend *Vermonts or Vermontis Respublica*, 1785. The reverse has an eye within a small circle from which diverge twenty-six rays, thirteen of which are long, their points intersecting a circle of thirteen stars, and the legend *Quartadecima Stella*—in view of Vermont coming in as the fourteenth State, which she did in 1791. The first issue of 1786 differs in its obverse from the above in the legend, which is *Vermontensium Respublica*, and in the number of rays, there being only thirteen. For some unknown reason, during this year the style of coinage

was changed, the significant and original ones above described being discarded for an imitation, and a miserable one at that, of those of Connecticut. The device of the above is a head and the legend, *Vermont*, *Auctori*, and of the reverse a female seated with olive branch and staff, and the legend *Inde, et Lib.* The head of one variety of this type is such a puerile affair that the coin is known among collectors as the *Baby Head*. The issues of 1787 and 1788 are similar, save that they are not afflicted with baby heads. There are other pieces long commonly credited to this State, but it is well settled now that they were issued at the mint of Captain Machen, in Ulster county, New York, with whom Harmon was a partner, or had some sort of a business connection. One has "*Britannia*" on the reverse of a *Vermont*, *Auctori*, and another "*Georgius III. Rex*" on the obverse of an *Inde, et Lib.*

NEW YORK.

No coins were issued by authority of New York, but several are credited to it. Their coinage was undoubtedly in England, and as a speculation. We have two varieties of copper coin known as the *Nova Eborac*, that being the legend of its obverse. The legend of the reverse is *Virt. et Lib.*, and the devices of both sides are much after the style of the Connecticut cents.

FIRST UNITED STATES COIN.

The first coin issued by authority of the United States, and the only one under the old Confederation, is the copper known as the *Fugio* or *Franklin* cent, the latter name being given it because of the sententious character of its legends. A contract was entered into with a Mr. Jarvis, and the issue was in 1787. The device of the obverse is a sundial upon which the sun is shining, on the right of which is the date, on the left the word *Fugio* and below, the sentence, "*Mind your business.*" The reverse is occupied by thirteen circles linked together and forming a large circle, in the center of which the words *United States* inclose the sentence "*We are one.*" The general character of the piece was certainly unique, and not unworthy the day and generation which gave it existence. The arrangement of the words *United States* so as to read *United States* or *States United*, with a few other differences, form the two noticeable varieties.

THE REGULAR MINT ISSUES.

The new Government, soon after its organization, set itself about the establishment of a mint and the coinage of money worthy of its sovereignty and adequate to the necessities of the people. In 1792 a mint was erected in Philadelphia, and in 1793 its operations began. In this year

was the first issue of cents and half cents; in 1794 dollars, half dollars and half dimes, eagles and half eagles; in 1796, quarter eagles, quarter dollars, and dimes; in 1849, gold dollars; in 1850, double eagles; in 1851, silver three cent pieces; in 1854, three dollar pieces. The issue of the copper cent was continuous, except in 1815, till the spring of 1857; the issue of silver three cent pieces was stopped in 1873 and that of the nickel began in 1865; the bronze two cent pieces begun in 1864, and ended in 1873; the nickel five cent piece appeared in 1866, and the silver five cent was issued last in 1873. In the matter of silver and gold our society is not so badly off as Saint Peter at the Temple gate, and yet we can make no great pretensions. Our gold consists of a California half dollar, and our silver of dollars of 1795, '97, '99, Trades of 1873 and '78, and the nondescript authorized piece of '78; of twelve halves, valuable in showing the most notable types and varieties; of a meagre exhibit of quarters, dimes and half dimes, and a full set of three cent pieces. In cents none but unimportant varieties are lacking, and in half cents the set is as complete as it will likely be for some years to come, the prices of the absent ones being excessive, and the pieces themselves difficult to obtain even at the highest rates offered. The bronze and nickel pieces are complete, or substantially so, the three and five cent pieces of 1877 not having yet wandered this way in the ordinary course of circulation.

HARD TIMES TOKENS.

The tokens of the size of the old cent, which made their appearance in 1837 and during the three or four years following, are not without value as mementoes of days of bitterness in politics; when party issues were well defined, and men, women and children were ranged in the two lines of Whigs and Democrats; when Jackson pitted himself against the United States Bank; when the great cities (on paper) in the woods and marshes of the West were vacated to their original pre-emptors, the wild cats and the frogs; when hundreds of banks with millions of capital, in promises, and which had flooded the country with "shin plasters," vanished in thin air; when poverty filled the land, and the cry of distress arose upon the air, like the moanings of a gale, from the Atlantic to the great prairies. These tokens were issued from the Waterbury, Conn., button factory, of the Scovilles, chiefly, if not entirely, as we are informed, and in large quantities. They passed as currency, being of good metal and weight, and though of insignificant nominal value as compared with the bank bills of the day, they are yet occasionally found in

circulation, while the bills exist only as curiosities in albums, or are laid away in some corner as reminders of days when bank note values, like Jonah's gourd, shrank out of existence, often even in a night.

We make note of some of the more significant devices and legends, as giving some idea to those who are not familiar with them or their character. Upon one is a full length figure of Jackson, in citizen's dress, holding out a plethoric purse in one hand, with a drawn sword in the other, while upon the margin are the words "A plain system void of pomp." The reverse represents a balky donkey upon whose side are stamped the letters L. L. D. (A "drive" at Harvard College for having conferred that degree upon a man, who though Chief Executive of the Nation was far from having any claim to literary merit) and the legends "Roman firmness," and the "Constitution as I understand it." Another exhibits a bust of Jackson, the words, "My experiment, my currency, my glory," "My substitute for the U. S. Bank;" a bear running, upon whose side is stamped "My third heat;" "My victory, down with the Bank;" "Perish credit, perish commerce," 1834. Another, with like bust of the old hero appearing from an iron chest with purse and sword in hand, "I take the responsibility," a mule on whose side are "L. L. D.;" "Roman firmness," "Veto," "The Constitution as I understand it." And still another with mule at full speed, "I follow in the footsteps of my illustrious predecessor" (quoted from Van Buren) a turtle walking off with a safe marked "Subtreasury," "Fiscal agent," "Executive experiment," or "financiering." Others represent a staunch ship under sail, bearing the name "Constitution," and the legend "Credit currency," or "Current," upon the reverse of which is the ship "Experiment," struck by lightning, her sails and spars carried away, going to pieces on a rock, and the legend "Van Buren Metallic Currency" or "current." "Millions for defense, not one cent for tribute;" "Bentonian Currency," 1837; "Mint Drop;" an ugly head inscribed "Loco Foco;" "Bentonian Experiment;" a phoenix rising from the flames, "Substitute for shin plasters;" "Specie payments suspended May 10th, 1837," are among the variety of devices and inscriptions borne by others. There were also issued many business cards in copper, some devoted entirely to advertisement, and others mixing business and politics.

BULL'S RUN MEDAL.

The hasty retreat of the Government troops from those of the rebels after the memorable encounter at Bull's Run is facetiously commemorated in a leaden

medal, the device of some jubilant genius "south of the line" in those early days of the civil war. It found its way into our cabinet through the kindness of one of our eitizens, but its prior ownership is traced to one of those amiable refugees from the South who "watched and waited over the border," at Toronto. Its obverse has a three quarter circle of thirteen stars around the upper margin within which is the full face view of an ass, head on either side of which are the letters "U. S.," and below, "Bull's Run, 1861." The reverse has an eagle in the center, and the legend "Long Legs and Light Weights" around the margin. It is of the size of the old dollar. The device or the obverse, whatever may have been the idea of the designer, is quite as significant of the

rebels' stupidity in not following up their advantage by a rush at the time into Washington, as of the bad management of the Federal forces. This medal is the only one of the kind we know of, and its scarcity may be accounted for, perhaps, by the necessities of the Confederates in later days for home-made bullets, or, possibly, the Bull's Run affair, in the light of subsequent events, may not have occurred to them as so worthy of an enduring memorial as it did when flushed with their short-lived victory.

The length of this article forbids mention of our medals, campaign medalets, etc., as well of our foreign coins, and we can only say that all are interesting, and many quite valuable. The number of American pieces is six hundred and sixty-one, and of foreign one thousand and fourteen.

Western Reserve and Northern Ohio

HISTORICAL SOCIETY.

REVOLUTIONARY CORRESPONDENCE OF 1777.

TRACT FORTY-SIX.

MARIETTA, March 30.

Among the earliest settlers of Marietta, Ohio, was a son of General Israel Putnam. Not long since, his great grandson, Douglas Putnam, Esq., of Harmer, near Marietta, found in the garret of his father's home- stead a package of letters labelled 'Letters, &c., to Major-General Putnam in 1777, &c.' All the letters of 1777 refer to that most critical time, when General Putnam held the posts in the highlands above New York, including the passes between the Army of the North under General Schuyler, and the army about Philadelphia under General Washington, and when General Howe threatened Philadelphia, and General Burgoyne was approaching Saratoga, and General Clinton trying to force the passes and join General Burgoyne. The following are copies:

WASHINGTON TO PUTNAM.

Amboy 22d May 1776

Sir Your Letter of the last night with the dispatches from Canada came to my hands at Woodbridge this morning. I wish that the information given you by Captain Golforth respecting the number of prisoners taken, may prove true, what he told you about the enemies not having sallied out, differs widely from General Thomas' acct of that affair You will please to give every assistance which General Schuyler requires, that may be in your power & lest you may not have kept a copy of his letter, I will transcribe that paragraph which contains his demands "Intrenching tools of every kind will be wanted, more powder, Lead & Cannon balls and Guns for the vessels on Lake Champlain

Rigging, Sail Cloth, & Sail makers to be sent up,

for Intrenching tools, Rigging Sail cloth and Sail makers I would have you apply immediately to the Provincial Congress, who will probably be able to procure them for you, Some of the members mentioned to me that they could procure a quantity of tools of which you will send off as many as you can spare, you must take care not to leave yourself destitute. I sent five tons of lead forward, which General Schuyler knew not of, however I would have you examine what quantity there is in store. If you can spare it, send up two tons more, as to the Cannon Ball & Guns, you will consult with Colonel Knox, who must judge what sort of each is necessary, & send them up with the other articles. I have already spoke to the Commissary General to send off as much salt provisions as he could but you must urge him on this head as they are in very great want I have no other place to depend but what goes from New York, he may Lay in all he can get to supply the quantity which he sends up, for he must take care to keep up his stock.

it was a misfortune indeed, that the vessels with powder & arms should fall into the hands of the enemy—Let the Committee by all means have the Pettiaugur to cruise off the back of the Island the sooner she is out the better, as more vessels with them articles may be daily expected

I have said nothing of powder to be sent up which necessary article should not be forgot You will please to send off two tons thereof which will serve until we can spare a farther supply

I remain with great regard

Sir Your most obt servt.

G. WASHINGTON

PS please to forward the inclosed by the first express or the first post which goes to Albany— it is left open for your perusal you will please to seal it & forward it.
MAJOR GENERAL PUTNAM

The next letter bears a water mark in the form of a goblet, with the bugle upon the side, with the letters "G. R." for its base and surmounted by the crown.

WASHINGTON TO PUTNAM.

TRENTON, Dec'r 3d, 1776.

D Sir

I was just now favored with your letter of the 30th ulto. Having wrote you fully yesterday and today of my situation. It is unnecessary for me to add much at this time. You will readily agree that I have sufficient cause for anxiety, and to wish for your arrival as early as possible. In respect to instructions or your Route you must be governed by circumstances, this has been the language of all my letters since I had occasion to call for your aid. The sooner you can join with your Division, the sooner will the service be benefitted. As to bringing any of the troops under Genl. Heath, I cannot consent to it. The posts they are at and the passes thro the Highlands being of the most importance, they must be guarded by good men. I would have you to give me frequent advice of your approach. Upon proper information in this instance much may depend.

I am Dr. Sir
with great esteem
Yr most Obedt Servt
G. WASHINGTON

PARSONS TO PUTNAM.

WHITE PLAINS 20th Sept 1777.

Dear General:

I find General Clinton returned from Jersey last Tuesday and brot about 200 Head of Cattle some Horses: The 35. & 57 Regts of british Troops 1 Battalion of Hessians consisting of 3 or 4 Regiments Two Regiments of Delaneys Brigade, Browns Coir Farmings Regiment and the York Volunteers incompd. On the Hill between Kingsbridge & Ft Washington Robinsons Regt & Hierleights independant Companies at Morissania. a Picket of fifty men in each redoubt on this side of the Bridge is all their Force except a detachment from the new Coirs for Rangers armd with Rifles about 500 in number and the light Horse.

The Redoubts are in a Line from Fort Independence to the Hill a little N Westerly of Richard Morris House They are strongly abattated and have a Ditch without and Horizontal Pickets projecting over the Ditch: in the Southermost Redoubt are

Two Twelve Pounders the next to that are four Embrasures but no cannon mounted in each redoubt one Cohorn. The Return of Genl Clinton before we could march to the Bridge after ye notice of the enemies march, has hitherto prevented any attempt that way: tis by ye Field Officers thot advisable to rest a few Days till their Present Alarm has a little Subsided The Speedy Return of the Enemy from Jersey I am informed was an annon'd by Information Mr Clinton receivd that Genl Putnam was moving down in Force to attack the posts at ye Bridge This is the best account I am yet able to Procure of the Enemys Strength at ye Bridge. There are also Some Foreign Troops at Ft Washington & on Teppets Hill not included before & also ye 7th & 63d british at Harlem The Grenadiers & light Infantry of the british Regt were compleated to 50 men & went with the main Army I have Two Deserters one Green Coat & one british Soldier who will soon be sent up this moment another british Deserter has come in, he says a Reinforcement of 5000 men are selected every Day when Genl Clinton proposes to attack the Posts in the Highlands

I am Sr Yr Obedt Servt

Saml H Parsons

To Hon Major General Putnam
Peekskill

WASHINGTON TO PUTNAM.

CAMP ON SCHUYLKILL 34 MILES {

FROM PHILADELPHIA Sept 23 1777 }

Dear Sir

The situation of our affairs in this Quarter calls for every aid and for every effort. Genl. Howe by various manuvres & marching high up the Schuylkill, as if he meant to turn our right Flank found means by counter marching to pass the river last night several miles below us, which is fordable almost in every part and is now fast advancing towards Philadelphia. I therefore desire, that without a moments loss of time you will detach as many effective rank and file under proper Genl and other officers as will make the whole number including those with General McDougal, amount to twentyfour hundred privates and non commissioned fit for Dutv. The Corps under Genl McDougal, to my great surprise, by a letter from him some days ago, consisted only of nine hundred & eleven. You will direct the officers commanding the detachment now ordered, to proceed as expeditiously as possible to reinforce me. The rout thro Morris Town and over Corells Ferry will be the best for them to pursue. Before they arrive at the Ferry they will hear where I am, but that they may know their destination, when they are in two days march of it they are to advise me

by express and I will write on the subject. I must urge you by every motive to send on this detachment without the least possible delay, no considerations are to prevent it. It is our first object to defeat if possible the army now opposed to us here. That the passes in the Highlands may be perfectly secure, you will immediately call in your forces now on command at our Posts—you must not think of covering a whole country by dividing em, and when they are ordered in and drawn together, they will be fully competent to repel any attempt that can be made by the enemy from below in their present situation. Besides, if you are threatened with an attack you must get what aid you can from the militia. The detachment will bring their Baggage, but I wish them to come with no more than will be absolutely necessary. That you may not hesitate about complying with this order, you are to consider it as peremptory and not to be dispensed with.

Col Malcom's Regiment will form a part of the Detachment.

1st The troops now ordered I am Dr Sir need not bring any artillery.

with great regard
your most Obedt Servt

The inclosed you will send G. WASHINGTON
Genl Gates by express immediately

To Major Genl Putnam

WASHINGTON TO PUTNAM.
CAMP AT PENNEBECKERS MILL }
Sept 28th 1777 }

Dr Sir

I wrote you on the 23d Inst—lest my letter should have miscarried, I now inclose you a copy I must request your immediate attention to the contents and that you will not delay a moment in sending the troops which are ordered. Their aid becomes more and more necessary, and I wish to urge the officer who shall have command to join me as soon as possible without injury and harassing the men too much. The Rout you will find marked out by the copy, which they will pursue with such other directions as are therein given I have only to add that your exertions in forwarding them on, and theirs to afford me the earliest possible succour, will not only be pleasing but extremely interesting. I fully expect that neither will be wanting.

I am Dr Sir with great regard Your Most
Obedt Servt

GO WASHINGTON

Endorsed Public Service Majr Genl Putnam at Peeks Kill

GO WASHINGTON

ISRAEL PUTNAM TO GOVERNOR TRUMBULL.

SEPT 27th 1777 5 o'clock A M.

Please your Excellency

Inclosed is a copy of Genl Washington's letter to me. by it you will learn the Situation of Our Army & the enemys at the

Southward & the pressing demand made on me for men in consequence of this I am obliged to call Genl Parsons from Below & to leave that Country uncovered and exposed to the ravages of the enemy. Also must, for the security of these passes—draw in all my out posts, & guard, which will leave the stores in various parts exposed. I congratulate you on the agreeable intelligence from the Northward—I am surprised at the large demand for men to the Southward—and can't conceive what is the cause of the numerous & spirited militia we have so often heard off in the Southern States.

G Washington has wrote for Col Morgans Riflemen must repeat my application for three thousand men to be forwarded with all possible Expedition—as the failure thereof will be at the Hazard of the post and the adjacent Country no news more than you have heard were I Genl Washington I would not live nor suffer any one with me live to see Genl Howe master of Philadelphia.

No Signature.

Endorsed by Genl Putnam. "Copy to Gov Trumbull Sept 27th 1777 for 3000 men"

ISRAEL PUTNAM TO GOVERNOR CLINTON.

HEADQUARTERS PECKSKILL. 29 Sep. 1777
Dear Sir

Border of General Washington all the Troops from this Post except about 1100 Continental and 400 of the Militia are withdrawn. I have received Intelligence on which I fully depend that the enemy have received a Reinforcement in New York last Thursday of about 3000 British and Foreign Troops That General Clinton has called in Guides who belong about Croton River: have ordered hard Bread baked, that the troops are called from Paulus Hook to Kings Bridge & the whole Troops are now under marching orders. Under these circumstances and from a variety of other considerations I think it highly probable the Design of the enemy are against the Posts in the Highlands or south Part of the Counties of Westchester or Dutchess Should their attack be upon the Posts in the Highlands You cannot have the least Expectation the Posts can be maintained with our present force against the strength the enemy may or Probably will send. When you consider the Infinite Importance of the Post to the general interest of the country & of this state in particular I cannot entertain a Doubt of Your immediate attention to the defence of this Post; unless a greater Force than at Present is here or appears probable to be here Is supplied for the defence of the Post You must be sensible I cannot be answerable for the Defence of it. I therefore beg you to pay an attention to this important Pass and afford me a Reinforcement of the militia of the state as will enable me to maintain the Post if this possi-

ble for you to pay a personal attention to this object I shall think myself happy in your Council and assistance.

I am Sr yr obedt Hl Servt

[Note without signature]

Indorsed: "Copy of a Letter to Govr Geo Clinton Sept 29 1777."

GOVERNOR CLINTON TO GENERAL PUTNAM.

KINGSTON 29th September 1777

Dear Sir

I received your Favor of Yesterday inclosing copies of Letters which you had received from General Parsons I think it highly probable from the several Accounts you have received that the Enemy design an attempt against your post and the Fortresses in the Highlands As this will at least be making a diversion in favor of their Northern Army if nothing more, tho I doubt their numbers at New York & Kings Bridge being as those accounts make them and I believe the Reinforcement mentioned by Mr. Fanning is nothing more than the arrival of their sick and wounded from General Howes army However I may be much mistaken in my opinion and we should always prepare for the worst

I am much surprised to learn you have so small a number of the Militia with you I had ordered six entire Regiments from Dutchess County to join you which I have not countermanded I have always found it impracticable to draw out the whole of the militia in any Quarter wherefore I have now ordered one half of the same Regiments towit, Freers, Scutherlands, Umphreys Sworthoudts, Brinkerhoofs Fields and Ludingtons immediately to march to your Reinforcement to continue in service for one month & then to be relieved by the Remaining Half who are also to hold themselves in Readiness to March on a Moments warning. Westchester militia you will please to order unto your assistance if wanted By the inclosed Letters to my Brother Col Allison, Hosbrouck & McClaghey you will see the steps I have taken to Strengthen the Fortresses in the Highlands which after reading you will please to Forward to Ft Montgomery.

I am Dr Sir

your

most

Obedient Servt

GEO CLINTON

P. S. I must beg Dr Sir that you will continue to let me have by express the earliest accounts you may receive from the South ward.

To the Honbl Major Genl Putnam.

Endorsed to the Honble Majr Genl Putnam.

GEN. PUTNAM TO JOHN HANCOCK.

PEEKSKILL, Sept. 29 1777.

8 o'clock P. M.

Please Your Excellency

I have the Pleasure to acquaint you that the Ten pieces of Cannon with fixed ammunition ordered from Springfield arrived safe this day at Peekskill Also with Sorrow I am obliged to inform you that by authentic intelligence received from Lt Fanning a prisoner of ours exchanged and came out left Saturday from N. York Sixty Sail of Transports arrived there last Thursday with three thousand british and German Troops being part of a larger fleet that the preparations making and Dispositions of the Enemy at Kingsbridge denote some Capital Expedition Speedily to be set on foot. Their guides are called in. Their bakers briskly employed baking hard bread. The ships hauld into the north river—a quantity of ammunition put on board. Col Bayards Regt have evacuated Paulus Hook and crossed to Harlem and the troops at the Bridge are put under marching orders. The late recruits with the troops before in N York amount to about Eight or nine thousand. The repeated long detachments lately ordered from this post has reduced its strength to about One thousand Continental troops and notwithstanding my repeated urgent application to this and the State of Connecticut not more than three hundred have come in from this state, more than half of these without arms and whats worse, it would be deemed unsafe to trust them, many of whom have deserted about two hundred and fifty from Connecticut which is all the force I have to depend upon exclusive of whats in the forts and ships which by the way are poorly manned. This post is of a much importance as any upon the Continent and I will exert to the utmost for its defence weakened as it is but permit me to tell you Sir that I will not be answerable for its safety with the strength left me against the force I am sensible the enemy can and believe will speedily send against it. [No signature. Indorsed "Copy to President Hancock" "Sept 29 1777.]

WASHINGTON TO PUTNAM.

HEAD QUARTERS October 1 1777

Dear Sir

I have yours of the 27 and 28 ults and am glad to find that the reinforcement I ordered is in such forwardness. I make no doubt but some troops have arrived at New York from Europe but I am pretty certain they are not anything like so numerous as your informant mentions. I know it has been their custom thro the whole Campaign to swell their reinforcements much beyond what they really were. If Genl Burgoyne

is defeated or hindred from making any further progress, as we may reasonably infer from the last accounts the North River will be no object for the Enemy. I rather think if Genl Clinton moves at all it will be thro Jersey to form a junction with General Howe

I do not fully understand from part of your letter of the 27th whether the Cannon were brought from Springfield by order of Congress or your own I can hardly think the latter because I do not know that they were wanted at peekskill Upon enquiring of Genl McDougall he tells me that each Brigade had its full complement of Artillery, but recommended it to you to have two of the heaviest pieces mounted upon travelling Carriages and kept to annoy any vessels that may attempt to lay in the River near you, the remainder to be sent up to Fishkills to which place I would advise you to remove your supernumerary arms and stores of all kinds

That matters may go regularly on in every department, I could wish you would inform me before you order any quantity of Artillery, arms or ordinance stores from Springfield, you may always depend upon being supplied with what is necessary and I shall then always know exactly what are our resources

If Genl McDougall should be mistaken in his opinion that all the Continental Brigade have their complement of Artillery you will in that case have them compleated before you send the Cannon to Fishkills

I am Dear Sir
Yr most obt Servt
GO. WASHINGTON

Genl Putnam endorsed "Public Service Major Genl Putnam at Peekskill Go, Washington yours of 29th Sept came to hand after sealing"

WASHINGTON TO PUTNAM.

HEADQUARTERS 15th October 1777

Dear Sir

I am favd with yours of the 8th and 10th instants, giving me the account of the loss of Fort Montgomery and the evacuation of Peekskill in consequence of it, but I am very glad to find that you had previously removed the greater part of the Stores. This Stroke would have perhaps proved fatal to our Northers Affairs in its consequences, had not the defeat of Genl Burgoyne providentially taken place upon the 7th instant. I can scarcely think that Sir Henry Clinton will pursue his Rout now the object of it is disappointed, I mean a junction with Burgoyne: But I hope if he should attempt to penetrate further you will be able, with the Militia from Connecticut and New York and the reinforcement sent down by Genl Gates to stop his progress.

Genl McDougall has just suggested a matter which he thinks of importance. He imagines that the enemy, supposing they are obliged to fall down the North River again, will destroy all the Boats they find, or carry them down with them in either case we shall have no means of crossing. He therefore advises that the Boat Builders in the peekskill department be immediately set to work to make a number of Boats, which may be built some distance back from the Water and brought down upon Carriages when wanted, but if the enemy go down again they may be built convenient to the Water. If our Boats are destroyed the sooner this works is set about the better.

Since the Battle of Germantown both Armies have remained quiet. The Enemy have been endeavoring to remove the obstructions in the Delaware, but they have not yet made much progress

I am Dear Sir Yr most obt Servt.
Go WASHINGTON
Genl Putnam

LUDINGTON'S REPORTS.

Sir. I must acquaint you of my yousage in this place. I find the militia was to join and I have not had the assistance of one man, you must well Remember you ordered Capt Dean and Capt Stephens. Stephens I never have seen. Dean I showed your order and Rote a few days ago Begging him to assist me in schoughting I have enclosed his answer to me. You must not Be bend too much upon my little party: If I am to gard the inhabitants I must be Reinforced spendly or shall be obliged to post my men in some Better place of Security and am Sir Yr obedient

Humble Servant
HENRY LUDINTON

3 oclock october 4th 1777
at Rites mills

P. S I beleive the inhabitants are entirely stript where they goo

Honoured Sir in haste I am to acquaint you that tha came up Last night with 2 frigets and five or six Royale and tenders and about 40 flat Bottommed boats and landed about about 3 thousand men under the command of governor tryon they immediately took the heights above tarry town and from thence kept the Heights until they thought they had got above our party But Luckily we had goot above them and paused at mr youngses where we thought Best to move towards them where we in open view of them and found to be vastly superior to us in numbers and moved of to Rights mills Having no assistance more than our Little party belonging to our Regiment I found on our Retreat before we goot back to Youngses they had sent forward a flag, But found that was in view of trapping us as they had

flanking parties who we discovered in order to surround us But after clearing the Regiment I rode Back and met the flag within a quarter of a mile of their main body the purport of his arrend was that governor tryon Had sent him to acquaint me that if we would give up our arms and submit they would show us mersy or otherways they were determined to take us and strip the contre. Sent in answer that as Long as we had a man alive I was determined to apose them and they might come on as soon as they pleased. We have not lost a man and the last move of the enemy was from Youngses towards the plains.

[NOTE.—This report has no address, date or signature. It is in the handwriting of Col. Henry Ludington, and upon a half sheet of letter paper of the same letter paper upon which Colonel Ludington's previous report

was made. Colonel Ludington's morning report of October 3d, 1877, shows his force to have been "1 Colonel 1 Lt Colonel, 5 Captains 10 Leutenunnts, no Ensign, no Chaplain, 1 Adjutant & Quartermaster 1 Surgeon, no Surgeons mate, 19 Sergeants, 9 Drummers and Fifers 182 present fit for duty 19 Sick present 3 Sick Absent 19 on Command 10 On Furlough Total 233"]
 "N. B. the maj is Gone home on furlow"
 "HENRY LUDINGTON"

[Colonel Ludington's regiment is one of the New York Militia Regiments mentioned in the letter of Governor George Clinton, and as it would appear from his order, but half of the regiment was in service. With 182 effective men against 3,000 of Governor Tryon, Colonel Ludington seems to have managed skillfully and to have sent a pretty plucky answer.]

EARLY INDIAN MIGRATION IN OHIO.

BY C. C. BALDWIN.

READ BEFORE THE STATE ARCHEOLOGICAL SOCIETY OF OHIO, IN SEPTEMBER, 1878.

In the historical map of Ohio, appearing in 1872 in Walling's and Gray's Atlas, and prepared by Col. Charles Whittlesey, the Indian occupation of Ohio appears as follows:

The Iroquois and tribes adopted by them, north-east Ohio, including the valley of the Cuyahoga, the Tuscarawas and Wheeling Creek; Wyandots and Ottawas, the valleys of the streams west of the Cuyahoga and flowing into Lake Erie, but following up the Maumee no further than Fulton and Henry counties. The Delawares the valley of the Muskingum; the Shawnees the Scioto and its tributaries, and as far east as to include the Raccoon, and west including parts of Brown and Highland counties. The Miamis the western part of the state, including the valleys of the Great and Little Miami, and the upper part of the Maumee.

These were in a general way the limits of the tribes in Ohio from 1754 to 1780. The Iroquois were mostly the Senecas, the western and largest tribe of that nation. The old settlers of northern Ohio to-day will generally say the Iroquois whom they met were Senecas, or generally pronounced the Sinekas. There were also Mohawks, Tuscarawas, Mingoes, and descendants not named in a tribal way of the ancient Eries and Neutrals. These named tribes were all intrusive within the period of history.

The Ottawas and Wyandots, although of different generic stock, lived much together, perhaps partly through sympathy

in a similar downfall. They had been allies against the Iroquois, and in succession overcome. The Wyandots were the remains of the ancient Nation de Petun (Owendot) and Hurons. Their traditions did not tell much, but the Jesuit Relations reveal the story so eloquently narrated in English by Mr. Parkman. They were, as shown by their language and early history and tradition, cognate to the Iroquois. When first known, the Hurons were settled on the south-east of the northern portion of Lake Huron, where a French mission was established as early as 1634. In 1649 they were completely prostrated and driven away by the Iroquois. Some moved west, some settled near Quebec, where they were heavily assaulted in 1656 under the very cannon of that city.

The Nation de Petun or Tobacco Nation, calling themselves Tionontates or Dinondadies, were found in 1616 south of Lake Huron, and just west of the Hurons. Their language was almost identical with the Huron. After the defeat of the Hurons they were nearly destroyed in the continuation of the same war. With some of the Hurons they removed to Wisconsin. They were driven back by the Dacotahs to the shores of Lake Superior, and about 1680 removed to the neighborhood of Detroit, their principal seat being opposite that place. Extending their hunting to the neighborhood of Sandusky, they partly settled in its vicinity, and continued there until a late day. In 1706 their war parties reached the Cherokees, Choctaws (Flatheads), and Shawnees, by way of Sandusky, the Scioto and the Ohio. (5 Hist. Mag., 267, IX., N. Y. Col. Doc., 886.) In 1732 they claimed all Ohio as their hunting grounds, and warned the Shawnees to plant their villages south of the Ohio. (5 Hist. Mag., 267, IX., N. Y., Col. Doc., 1035.) They gradually centered at Sandusky before the Revolution.

The Ottawas were Algonquins, and in 1640 inhabited the islands of Lake Huron, and the northern part of Michigan between Lakes Huron and Michigan. They were early intimate with the Wyandots. In 1646 Algonquins were living with the Petun (Relation of 1648), most likely the Ottawas. After the overthrow of the Hurons, they fled to the islands at



the mouth of Green Bay, thence beyond the Mississippi. Driven back they were after 1672 inseparable companions of the Wyandots (5 Hist. Mag., 264.) In 1709 they were at war with the Miamis (IX. N. Y. Col. Doc., 827.) In 1747 the the Hurons (or Wyandots) who had been already established at Sandusky, persuaded a portion of the Ottawas to settle on Lake Erie on the lower Maumee, promising trade with the English (X. N. Y. Col. Doc., 162.)

The Iroquois proper, when first known to the French in 1609, did not extend as far west as Lake Erie. The Neutral nation inhabited the banks of Niagara river, the east end of Lake Erie and its north shore. The map of Gallinée of 1669 has the plain legend, north of Lake Erie and west of Ontario: "Here was formerly the Neutral nation." They were called Kahkwas by the Senecas, and a river (18-mile creek) south-

west of Buffalo, was named Gah-gwah-ge-ga-aah, "Residence of the Kahkwas."*

In the relation of 1641 the Neuter frontiers are placed on the river Ongniaahra, which starts first from the Lac d'Erie, or of the Cat nation and just within the territory of the Neutrals, which ranged from the east to the west, "towards the Nation du Chat, or Eriechronons." The author was missionary among the Neutrals. They were of the Huron Iroquois family, called by the Hurons Attiwandaronk (a nation speaking a little different language). The French called them Neutrals because such was their position in the Huron-Iroquois war; but the Iroquois quickly overcame them, and in 1651 thoroughly devastated their country. Some joined the scattered Wyandots, "Tiotontadies," and in 1653 were west of Sault St. Marie with them. The locality is called in the Jesuit Relations, A otonatendie. The villages were likely separate, as 1653 the Neuters are said to be three leagues beyond the Sault, and on Sanson's map, of 1657, next the Sault are Aouentsiouaeron, no doubt corresponding to the name of the locality. Just west appear the Attiouandarons. A portion of the Neuters submitted to the Iroquois and were adopted into the Senecas.† The descendants of the two branches met in Ohio from opposite ends of Lake Erie. The Peninsula north of Lake Erie was devastated. The Iroquois had turned a flourishing and thickly inhabited Indian country into a thinly settled hunting ground. They then turned their attention elsewhere, and after a severe war in 1655, thoroughly overthrew the Eries, a cognate tribe inhabiting the south of the lake named from them. But little is known of the Eries; they were perhaps never visited by but one white, Etienne Brulé, in 1615, soliciting aid for the Hurons. The brief report by Champlain of this journey leaves it doubtful if Brulé ever saw Lake Erie. It is said in 1646, that in approaching the Erie country from the East "there is a thick, oily, stagnant water which takes fire like brandy."‡ The Relation of 1648, written among the Hurons, says that the Andastes were below

* O. H. Marshall, *The Niagara Frontier*.

†2 Shea's *Charlevoix*, 271.

‡2 Shea's *Char.* 190.

the Neutrals, reaching a little towards the east and towards New Sweden, that Lake Erie was formerly inhabited along its south coasts by the Cat nation, who had been obliged to draw well inland to avoid their enemies from the west. They had a quantity of fixed villages, for they cultivated the earth and had the same language as the Hurons. Charlevoix says that the Iroquois obtained from the country of the ancient Eries "Apple trees with fruit of the shape of a goose's egg, and a seed that is a kind of bean. This fruit is fragrant and very delicate. It is a dwarf tree, requiring a moist, rich soil." This can be no other than the paw-paw, abundant in southern Ohio, particularly on the river, and common in the center of the State. The plant rarely occurs along the lake and does not fruit there. It is abundant around some of the ancient works at Newark.

Sanson places the Eries under the easterly half of the lake, and well down from it. La Hontan, around the west end, and the Andastes beneath them. This location was evidently wrong. De Lisle, in his map of 1703, confounds the Wabash and Ohio, making it run near the lake, and the Eries were below the Ohio. In 1720, he places the Ohio more properly, and the Eries well between the lake and river.

Bellin, in 1744, in the capital map he made for Charlevoix, places them similarly. Coxe, in his *Carolana* (1721), places them similarly and, following La Hontan's error, places the Andastes south-west of the Eries.

What is known of the subsequent fate of the Eries, appears in the Jesuit Relation of 1660, which says the Senecas were the most numerous of the Five Nations because of the great numbers they had adopted from conquest, naming the Hurons, Altieuendaronk, or Neuters, Riquehronons (Eries), who are those of the Nation of Cats, the Ontouagannha, or Fire Nation, the Trakouachronnons, and as an instance of the strength of the Iroquois, says they overcame 2,000 men of the Cats in their own intrenchments. The Iroquois conquered the Andastes, a cognate tribe living on the Upper Susquehanna and branches of the Ohio. Mr. Shea has identified them with the Susquehannas, Minguas, Mingoes or Canesto-

gas. After their overthrow, in 1675, they were adopted into the tribes of the league, and in various ways figured in the after history of Pennsylvania and Ohio.

The Andastes are probably the Attiouandarons, of Sanson's map of 1657, placed on the east of the branch of the Ohio, running from Chatauqua Lake.* The Tuscaroras were a cognate tribe from the south (North Carolina), who returned north in 1712 and were received as a Sixth Nation by the Iroquois. Some of them lived in Ohio. The Algonkin nations living in Ohio were the Miamis and Illinois from the westerly, the Shawnees from the southerly, and the Delawares from the east. The Miamis had apparently moved to the south-east within the time of history. They were first found by the French in the neighborhood of Green Bay, and after found around Lake Michigan, in 1679, at the south-east of it. Little Turtle described their probable course when he said: "My forefathers kindled the first fire at Detroit; from thence he extended his lines to the head waters of the Scioto; from thence to its mouth; from thence down the Ohio to the mouth of the Wabash, and from thence to Chicago over Lake Michigan." The Miami Confederacy had several sub-tribes, as the Ouitatenon, or Wea, and Piankeshaus. The Illinois, a nation nearly allied, were on the west and south. In 1679, the St. Joseph, of Michigan, was the river of the Miamis, and the names of three rivers in Ohio keep their national name. They were the tribe next west of the Eries, and probably the one that pushed them inland from the north-west.

The Delawares were Algonkin living, when first known, on the coast. The Dutch began to trade with them in 1616. The Andastes were their superiors, and when the Iroquois proper conquered the Andastes, they succeeded to the supremacy. About 1700, in a war with the Cherokees, they reached the Ohio, settled, and remained there until 1773. They called them selves Lenno Lenapi, meaning men, a name similar to that used by many tribes for themselves. They claimed to be the oldest of the Algonkin tribes, and were styled grand-fathers. This means, no doubt, that they had been the first

* They appear in the admirable manuscript map of Franquelin, dated 1688, on the western branches of the Susquehanna.

of the Algonkins to occupy their territory, and they may have been the oldest or first in the great Algonkin emigration from the west and northwest. The very position of the Delawares and other coast Indians makes it probable that they were the earlier emigrants.

The early history of the Shawnees and of Southern Ohio is scantily traced. Their position did not bring them within the early acquaintance of whites, or the knowledge of history. When they applied to La Salle for French protection, he replied they were too remote. They were Algonkin, but their language had varied much from the Delawares or Miamis. In the belt of the Algonkins, extending from the Mississippi to the Atlantic, below the lakes, they occupied a position between the two. Within the period of history, they pushed into Ohio from Kentucky, and the Cumberland River is called, in the early French maps, the river of the ancient Shawnees. That was not the first time they had been on the Ohio. After the destruction of the Eries, they seem to have been next south upon that river, and I cannot but believe that while the Eries were at peace, the Shawnees lived next south, probably in Southern Ohio and Kentucky. The dividing ridge between the lake and river was a not unnatural boundary, and perhaps was the line in most of the State until the Eries were forced inland and, no doubt, pushed down the Ohio. A manuscript map of Jolliet, dated 1674, represents the Upper Ohio as divided into two parallel branches, and below the southerly is written "Pays Kentayentonga." That was an Erie town.

But the war with the Eries was too short and easily concluded to believe that the Iroquois, in that war, conquered the whole of the State of Ohio.

In 1669, when La Salle wanted of the Senecas a prisoner from the Ohio, as a guide to his intended discovery of it, the people living there were called Toagenha, or Otoagannha, "A people speaking a corrupt Algonkin." (O. H. Marshall's *La Salle and the Senecas*, 21, and Vol. I, *Margry Papers*.) The Indians undertook to dissuade the Frenchmen from their journey, telling them the Toagenha were a very bad people, who would kill them in the night, and they would run great risk

before reaching them of meeting the Ontastois. We may be quite certain these tribes were the Shawnees and the Andastes. La Salle afterward procured a Chouanon (Shawnee) and was probably the first to visit the Ohio.

In the Relation of 1670, it appears that Marquette met at La Pointe, the Illinois. The Shawnees lived east-south-east of them, upon the Ohio.

In the Relation of 1672, Father Garnier was among the Senecas when there arrived a captive of the Ontouagannha or Chaouang (Shawnee.) This particular Shawnee the good father converted and baptized at once, and he expresses the belief that he entered Heaven the same day he arrived at Tsonnontouan.

De Laet, in 1632, getting his information from the coast, enumerating the tribes on the Delaware, says: Some persons add to them the Shawanoes.

Having taken back our Ohio tribes as far as written history will, it may not be uninteresting to glance at a map made by Sanson, the royal geographer of France, about 1657.

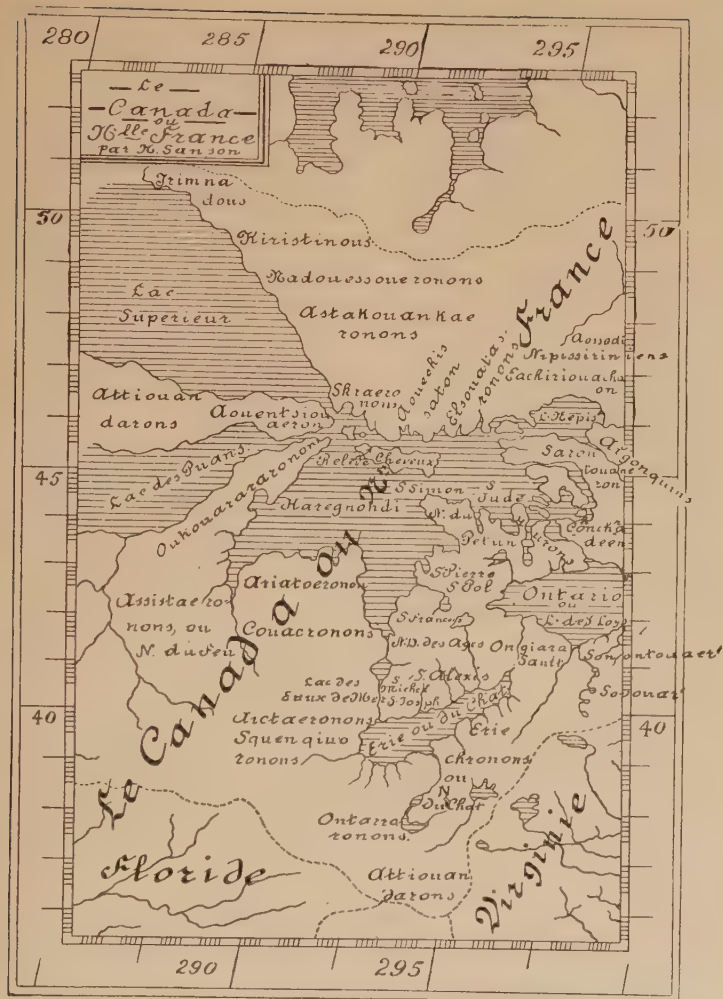
The position of the tribes and the similarity of names with the names in the earliest Relations, show that the geographical date of much of the map is 1640, about 30 years before the Ohio or Mississippi were discovered. The western tribe of the Iroquois, the Sonontouans, are east of the Genesee. The Hurons and Petuns occupy the northern part of the Peninsula north of Lake Erie, the Eriechronons or du Chat occupy between the Eastern half of Lake Erie and the Ohio, the upper part only of which appears, flowing from Chatauqua Lake. South-east of that branch of the Ohio, are the Attiou-andarons, which may mean the the Neuters or the Andastes, probably the latter, as the position would be nearly correct, and the name might apply to either.

South of the west end of Lake Erie are the Ontarraronons, meaning Lake people, as Ontario means beautiful lake. These were likely the Algonkins, who had pushed back the Eries and very likely the "Miami du Lac," who gave name to the Maumee. The lake referred to was perhaps Sandusky Bay, often called lake, and reminds one of Totontaraton in 1744, one of









Homer P. Ritter, Del.

the places of the Hurons. West of the lake are the Squen-
 quiuronons; just above on the Detroit river the Aictæro-
 nons; where the river flows from Lake Huron the Couacro-
 nons, and further north the Ariatoeronon. On the Peninsula
 or point between Lake Huron and Michigan are the Oukouar-
 araronons. Lake Michigan is merged into Green Bay; its south-
 erly course does not appear; west of all but the last named tribe
 are the Assistaeronons or Nation du Feu. South and south-
 west of all these named are the Apalatcy Mountains, with no

Mississippi valley, and with Spanish names. The last named tribe were the well-known Mascoutins. The name Squenquiuoronons, at west end of Lake Erie may have been the Nepissing branch of the Ottawas, called Squekaneronons (9 N. Y. Col. Doc. 160), said by Sagard in 1624 to be their proper name, or the name may refer to the lake, as in Sagard's case. The lake is Skekouan. The names on this map are Huron, and Indians are so apt to make a descriptive name, which sounds to whites like a tribal one, as to add greatly to the labor of study. In the very map before us the Skraeronons living east of Sault St. Marie are simply people of the Skiae or Sault (2 Shea's Char., 271). The Jesuit Relation of 1662, p. 62, has an enumeration of the bands of Indians in the Michigan peninsulas, all Algonquins and all friends of the Hurons, and all trading with the French, save some of the Five Nations and some Puants farthest to the west. The Ontaanek are, no doubt, our old friends in north-west Ohio, the Ontarraronons. I should perhaps explain for those not familiar with Indian names that the termination "ronon" is Huron for nation, and that the terminations "nek" and "gouk" are Algonquin for the same. The Ontaousinagouk may well be the Squenqueronon. The others are Kichkagoneiak, Nigouaouichiririk and Ouachaskesouek. The first were probably Nepissings, the next to the last were no doubt the Niki-kouek of the relation of 1648 (p. 62, Quebec Ed.), and likely the Couacronons and no doubt the Ottawas.*

We find, then, about 1640 the Eries ranged in Ohio from near the east end of Lake Erie to near the west, and held the country back and part of the Ohio river. That everywhere west were Algonquins, probably the Miamis and Ottawas pressing upon them. That below them on the Ohio, were the

NOTE.—A letter from P  re Lamerville to P  re Bruyas (3 N. Y. Col. Doc., 488), dated 4th November, 1686, says the Senecas wanted him to join them in fighting with Tolere tionontatez (Denondades or Wyandots), the Ennekaragi and the French. It appears from the New York Council Minutes, XIV., 395, 396, that in May, 1723, they were visited by eighty men, besides women and children of the great nation called Neghkereages, consisting of six castles and tribes, and that lived near a place called Mischinakinack, between the upper lake and the lake of Hurons.

In Colden's Map, prefixed to his Five Nations, they appear there and are called Outaouacs or Necariages. The Kichkagoneick were likely the K  keraunonronons, the one name having an Algonquin ending, and the other the Iroquois or Huron. Lamerville in the same letter says: "A man named Andrew Flannaverses has gone with two others to look up the K  keraunonronons, who are, I believe, the Nypissings, in order to induce them to come and live with the Iroquois."

Shawnees, and south-east of them and their kindred the Andastes were the Algonquin nations.

In the known history of the Iroquois we are not without some further light. In 1609, when first known, they were in Central New York and the confederation was formed. By clear tradition they had resided around the St. Lawrence at Montreal. It was evident that for many years they had occupied their then home. Mr. Morgan, in his Iroquois, places it since 1500, in a later article in *N. A. Review*, since 1450 at least. The Hurons, Neutrals, Iroquois, Eries and Andastes lay so compactly together in the Algonquin sea, around them that their history evidently had much in common. It is safe to assume that all the southern of these tribes emigrated from the north. Central New York must have been very attractive to fishermen and hunters. The league was formed after the migration. It appears, then, with some clearness that the Eries emigrated from the north-east to the region of Ohio and had likely occupied northern Ohio at least 150 years; no one can tell how much longer. By tradition, the Iroquois in this movement warred with the Algonquins, no doubt all they touched, and probably Delawares, Shawnees and possibly the Miamis. The Tuscaroras very probably became separated in this struggle.

The location of tribes, tradition and language all point to an earlier emigration of the Huron Iroquois family from the west, and we think Mr. Morgan has well established its line as north of Lake Erie.* It is well-established also that the Algonquins came from the north-west, and Mr. Morgan thinks both branches of Indians went north of Lake Erie as the more natural highway. That seems probable of the Delawares; the Alleghanies were a natural barrier. We would suggest, however, that there may have been emigrations south as well as north, either by the lake shore and portages or down the Mississippi and up the Ohio. Evidences of both are found in the movements of the north-west tribes and the traditional history of tribes upon the Ohio. The Shawnee language was quite corrupted and the Delaware and Miami were much

* 110 *North American Review*, 33.

more alike than either like the Shawnee. We submit that this similarity had a cause in past history, and the Delawares, Miami and Illinois were nearer akin than either to the Shawnee, that the Shawnee emigration was different. The Iroquois pushed upon the Algonquins of the north emigration, who went in all directions, some south-east of the Alleghanies and some to the south-east from west of Lake Erie. Were not the Shawnees an earlier migration made to the south of the lakes? Their language showed early intercourse with other tribes, their tradition was that they migrated with the Foxes and Kicapoos, that they turned to the south, the others to the west. Affinity of language gives color to the tradition. Heckewelder writing in 1818 gives a tradition of crossing a great river and meeting the Allegwi, or Tallegwi. This tradition has been supposed to refer to the Mound-builders. His own view of it was, we think, evidently colored by his knowledge of the mounds. But the tradition as given by Loskiel, writing in 1778, is that about 80 years before that, on the whites settling on the coast, the Delawares came to Ohio, drove the Cherokees away and settled about Beaver Creek (p. 127). He adds at the present time, the Delawares call the whole country as far as the entrance of the river Wabash into the Ohio, "Alligewineugk, that is," says he, "a land into which they came from distant parts."

The Cherokees, in fact, long after held the mountains of east Tennessee and Kentucky, and stoutly maintained their ground against their adjacent neighbors, the Delawares and the Shawnees. The western tribes warred with them. In 1679, the Ottawas* called the Upper Ohio "Olighin Sipi." The name Alleghany, sometimes spoken of as our only word from the Mound-builders, we submit means the Cherokees. In the atlas of the Royal Geographer, D'Anville (Paris, 1746), a branch of the Ohio, apparently the Kenawha or Monongahela, is called river "des Tchalaquéc" evidently meaning the Cherokees, called otherwise Chalakees, or more properly, says Gallatin, Tsalakies I. D'Anville's very fine and full map of 1755, he spells it Alegue, and makes it branch to the east above Pittsburgh, apparently the Kiskeminetas. The Iroquois had a

tradition that they drove Indians from this vicinity. In 1722 in treaty with Virginia, their orator said that all the world knew that they had driven away the Cohnowas ronon. Had the Iroquois and Delawares joined in this adventure? and was Heckewelder right in this part of his tradition?

The time of the conquest is uncertain, the extent of occupancy, but I think it reasonably established that the Talegewi were the Cherokees. I am pleased after coming unexpectedly to this conclusion to find it had previously been announced by Mr. Brinton.*

A critical study and comparison of the Cherokee language with other Indian languages would throw some light upon the early history of the west.

Mr. Brinton says "it has a limited number of words in common with the Iroquois, and its structural similarity is close." Gallatin and Dr. Barton were inclined to think the Cherokee belonged structurally to the Iroquois family. The differences of it from the Iroquois were probably even greater than between the Shawnee and other Algonquin tongues. I submit that the similarity of the Cherokee to the Dakota languages is greater than to the Iroquois; a conclusion I believe Mr. Gallatin and Heckewelder would have reached but for the limited information accessible to them about the Dakota tongue. In 1540, De Soto apparently found them upon the upper waters of the Tennessee and Cumberland at a time when likely the Akansea were lower on these rivers. In 1669 the Shawnees were on the Ohio next the Andastes. The Shawnees were driven south by the Iroquois, and settled on the Cumberland. They must have displaced the Cherokees, and in part, possibly, the Akansas, driving one to the west

*NOTE 1.—Mr. Shea, in *Voyages Up and Down the Mississippi*, p. 75, and also in his article in the *American Cyclopædia* on the Arkansas, suggests that they may have been the Alleghin, and, page 120, the Ohio is said to be called by the Oumiamis and the Illinois the Arkansæa, because that tribe once dwelt there. This information comes from the banks of the Mississippi. The mouth of the Ohio is a long way from the Alleghany, and tribes from the west would not drive a tribe so far back in their own track. The Dacotah character of the Arkansas would show them improbable intruders in the Allegheny and properly belonging geographically at the mouth of the Ohio, or where afterwards found. "It is the united river, commonly called Ouabachi, called by the Illinois Arkansæa."

Notice that the text speaks of the united river emptying into the Mississippi, recognizing the three branches, Wabash, Ohio, and the other from the S. S. W. on which are the Shawnees. In a map in my possession Peter Schenck, Amsterdam, 1708, the Cherokee river is called the Oceansea, in another early map the Akansea, and the Arkansas need not to have retired far from its mouth down the Mississippi, nor to have separated from their Dacotah brethren. Had the Allegheny been called Arkansæa by the tribes living on it, the case would have strengthened. In Marquette's map of 1673, the Arkansæa are placed on the east bank of the Mississippi, below the Ohio.

and the other to the east and north-east. At any rate, as we have seen, we find the Cherokees shortly after on the upper Ohio, and, if I am right, by an emigration first down the Mississippi, and secondly up the Cumberland and Tennessee. Mr. Shea (*Am. Cyclo.*, *Art. Cherokees*), well describes the home of that tribe when first known to the whites to be the upper valley of the Tennessee, the mountains and valleys of the Allegheny range, and the head waters of the Savannah and Flint. This tribe was, perhaps, the vanguard of the western Dakota emigration down the valley of the Mississippi. By Cherokee tradition they did not build the mounds in their country.

The Shawnees and Cherokees seem to have been the foremost in the great Indian migrations which met the Mound-builders. It is thought singular that there are no traditions of that move.

But when we think how faithless are the traditions among the whites of one hundred years ago, almost sure to be very wrong, even of one's great-grandfather, and that the Mound-builders apparently left Ohio several hundred years ago, at least, the want of memory of that event does seem singular. Indians were always warring and moving. But the same careful linguistic study in America that has told so much in the Old World will tell us something of the New.

The early voyagers along the coast, nearly all speak of copper in the hands of the Indians. Even in so small a book as Mr. Higginson's "*Explorers for Young Folks*," this is very striking. In Virginia, on the Hudson, and in New England was found enough to impress the travelers. It could have come from but one source, Lake Superior. In the Mississippi valley some may have been found in the drift, but not enough to make such abundance as evidently existed. There was much more commerce among the aboriginal tribes than is generally supposed. The first discoverer of Florida found a trade with Cuba. There are in the West even on the borders of the lakes evidences of trade with the Gulf of Mexico, and in later days there was a trade across the plains.

We say we think there was copper enough to show a trade most likely with the Algonquin nations, as they held the mines, and as at that time the Huron Iroquois held the north of Lake Erie, we think it took place south of the lake. The main mining was, no doubt, long before and, as shown in the earliest account

of the ancient copper mines,* many had long been abandoned. We think some had not, and that Algonquins were adequate to continue in a feeble way the prior works, and the Shawnees occupying the Ohio river, famous afterward as enterprising traders, to conduct the commerce.† Possibly this helped to corrupt their tongues. A theory has been suggested that the Mound-builders voluntarily abandoned Ohio and withdrew, finding the experiment of northern life too laborious. The movements of nations are not so voluntary and independently complete. If Mound-builders came from a better climate and place to Ohio and built the immense works they did here, it was because there was a force behind them pushing them on, and after such immense labor they abandoned Ohio, there was a pressure from the other way. Ohio, from being well peopled for savagery, did not become a waste without force.

We take it for granted that when the advance of the two great families of northern Indians entered Ohio, they found prior occupants. Who were they? Not highly civilized, but village Indians, cultivating the soil, and in some places thickly settled; not building homes of brick or stone. A people who did not grow in Ohio indigenous to the soil, and die like an annual plant, but not even leaving seed behind them. They had their affinities of character, manners and blood with other people, and with whom? It seems as though no one could thoroughly read Mr. Jones' book on the southern Indians without being struck with the similarity of the works and relics found among them and in Ohio. Certainly the Ohio works and relics are more like theirs than like any other.

Mr. Jones and other leading archæologists after him have thought some of the southern tribes connected with the Mound-builders of Ohio, and that the descendants of the latter were likely at the time of the discovery in the south. Geographically we should look there. The entire north occupied by tribes from still further north and west, where could the prior residents possibly have gone but to the south.

A proper linguistic study might throw light upon the problem. The Shawnee language was perhaps corrupted by captives or adoption. More corrupted than any other of that generic race, as west and east was spoken purer Algonquin, and they apparently preceded the Iroquois family in the occupation of Ohio. From what tribes or of what tongues were the captives, and what nation was so long in contact with the Shawnees as to so affect their language?

* Col. Charles Whittlesey's Smithsonian Contribution, "Ancient Mining on the Shores of Lake Superior."

† Since this paper was written, Rev. Edmund F. Slafter has published in the *N. E. Historic and Genealogical Register* for January, 1879, a very instructive article exhibiting considerable direct testimony from the early French Memoirs, that the Indians then procured copper in quantities from the Lake Superior mines.



WESTERN RESERVE

—AND—

Northern Ohio Historical Society.

TRACT No. 48.

Annual Meeting of 1878—Eleventh Annual Report—Obituaries.

The eleventh annual meeting of the Western Reserve and Northern Ohio Historical Society was held at its rooms last evening. President Whittlesey being absent from the city, Hon. John W. Allen occupied the chair. The annual report was presented by the Secretary, Mr. C. C. Baldwin, as follows:

SECRETARY'S REPORT.

During the past year the Society has made its usual progress, and its usefulness has been greater than usual.

Its library and manuscripts have been much resorted to by persons who are engaged in general or local historical investigations and writing, or who were interested in family history.

There has been added to the

LIBRARY,

Bound volumes.....	257
Pamphlets.....	574
Total addition.....	\$31

MUSEUM.

The additions to the Museum have been considerable. The thanks of the society are due to Mr. John L. Cole of Elyria, who has collected for us many valuable relics from this and other States. Most of them will be found in the Lorain County case labeled to the donors. That, our largest case, is now full to overflowing with many rare and several unique articles of value.

Mr. Baldwin, the donor of this case, has this year returned from abroad, bringing with him bone implements from the Swiss lake dwellings and elsewhere, which are donated to the society.

The former gifts of Mr. William Perrylogg, described by him in Tract No 24, were loaned to the Cleveland Loan Association, and returned by him with other curious matters in the case in which they appeared at the Loan Exhibition.

IN THE DEPARTMENT OF MODELS.

We have not yet found the friend who will make small casts for us, but we have a number of valuable gifts. Dr. E. T. Sterling, assisted by Mr. Herkomer of this city, presented about a year ago two very fine and beautiful ones.

The first is the celebrated Inscription Rock at Kelley's Island, supposed by Mr. Schoolcraft to contain the record in stone of the final conquest of the Eries by the Iroquois. Whatever be its subject, it is one of the most interesting of rude inscriptions. Near by that is a large rock with shallow, dish-shaped depressions, supposed by Dr. Sterling to have been made in polishing stone implements. The second model is of that rock with an Indian girl engaged in the work.

We have now a third model from the Doctor's skillful hands of

ORIGINAL CLEVELAND HARBOR.

representing the lake bluffs, the old river bed, the river and the geological strata as they appeared in their primitive state.

No amount of description, or even illustration, conveys to the observer such precise ideas of objects, whether natural or artificial, as well-constructed models. They are becoming a necessary part of geological surveys in Europe, and will soon be considered necessary here.

In addition to our seven models in plaster of the ancient

STRUCTURES OF THE PUEBLO INDIANS

in Arizona, New Mexico and Colorado, already in our possession, made by the United States geological surveys under Professor Hayden, we have just received another, a gift from the same steadfast patron. This is a restoration of the Pueblo Bonito, situated in the Chacos Canon Arizona, on a scale of one inch to twenty-four feet. It is an enclosed town, fort and buildings, in one structure. In some respects it varies from the other models, and to be understood requires to be seen.

From the same source we have received two thick folio volumes, containing the photographs of nearly one thousand North American Indians. This collection is also by the Hayden Survey, and has been the result of twenty years' labor in that line. All the photographs that could be found or obtained by the survey from living Indians, or from portraits, are here collected. A brief notice of the party accompanies each likeness. Only fifteen sets of this work are in existence.

THE ROOMS

have been rearranged, the bookcases being moved over to the west wall, while the museum occupies the east side. The light, not being intercepted by the cases, falls all over the room, and makes it much pleasanter.

THE TRACTS

published last year were:

- No. 43. Annual Meeting of 1878.
No. 44. The Grave Creek Inscribed Stone, by President Whittlesey.
No. 45. Numismatics, Facts in regard to early American coins, by Henry N. Johnson.
No. 46. Revolutionary Correspondence, Letters of Washington and Putnam.
No. 47. Early Indian Migrations in Ohio, by C. C. Baldwin.

THE INCOME

of the year has not been as large as usual, owing to the low rates of interest.

The amount of income has been....\$751 38
Balance on hand last year..... 44 16

\$795 54

Expended.....\$731 76

Balance..... \$64 78

The bills out and unpaid will absorb about half this amount.

The number of

VISITORS

last year was 3,973.

We lost by death last year two life members and one annual, brief obituaries of whom are attached.

Respectfully submitted,

C. C. BALDWIN, Secretary.

The report was accepted.

DONORS TO MUSEUM.

Martin Allen, Hays City, Kansas; Prof. James A. Barnes, Waterloo, Indiana; S. Brewster, Bass Lake Island; D. C. Baldwin, Elyria, Ohio; F. A. Bates, N. A. Chapman, Twinsburg, Ohio; John P. Cowing, H. Clifford, Wellington, Ohio; Mrs. Counery, Oberlin, Ohio; J. M. Clark, Charlevoix; Dr. J. W. Craig, Mansfield, O.; J. L. Cole, H. D. Dennis; Henry Daily, Coe Ridge, O.; Mrs. Mary B. Fowler; Miss Jessie French; Mrs. Elias Felt, Eaton, O.; John Fisk, Waterloo, Ind.; W. P. Fogg; Master Theodatus Garlick, Bedford, O.; Miss L. T. Guilford; J. A. and R. S. Graham, Chagrin Falls, O.; John Goodman; Burt M. Gardner; Albert Geyler, Sebewing, Mich.; H. H. Gale, Hillsdale, Mich.; T. H. Hawlet,

Eaton, O.; L. S. Hoskins, L. E. Holden; Luther Hodges, Shiloh, O. H. M. Henning, Waterloo, Ind.; Isaac Hecker, J. Herkomer; Fred P. Hills, Delaware O.; Israel Huckins, Lexington, Mich.; Dr. Isbell, Kendalville, Ind.; Charles Ingersoll, Elyria, O.; Master Charles Johnson; H. N. Johnson; L. A. Kelsey; Dr. Lyman Little, J. E. Lyon, Oscar H. Laman, William McBride, Waterloo, Indiana; Dr. A. Miller, Mr. Montague, Eaton, Ohio; Thomas C. McCormick, Pelee Island, Ontario; L. E. Parsons, Jefferson, Ohio; Roy Peck, Charlevoix, Mich.; Ruggles, Bronson, Michigan; Dr. J. Smith, Goshen, Indiana; Dr. E. Sterling, John Shadford, Eaton, Ohio; Frank H. Smead; Martin Terry, Eaton, Ohio; William Willson, Butler, Indiana; Dr. Wood.

DONORS TO LIBRARY.

S. M. Andrews, Marietta, O.; Wm. S. Appleton, Boston, Mass.; Chas. A. Ashburner, Adjutant General, Washington, D. C.; C. C. Baldwin, Dr. Jas. E. Barrett, Wooster, O.; State Board of Health, Mass.; C. T. Blakeslee, Hon. B. R. Beavis, Sam Briggs, Teunis G. Bergen, Bay Ridge, N. Y.; R. A. Brock, Richmond, Va.; Henry L. Brown, Rev. C. D. Bradlee, Boston, Mass.; H. J. Coe; Dr. William D. Cushing; Mrs. William Collins; Central Ohio Scientific Association, Urbana, Ohio; Christian Cackler, J. Colwell; Jeremiah Colburn, Boston, Mass.; Edward W. Cobb; Hon. Charles M. Crosswell, Governor of Michigan, Lansing, Mich.; Julius Day, Ravenna, Ohio; Davenport Academy of Natural Sciences, Iowa; Delaware Historical Society, Wilmington, Delaware; H. D. Dennis; J. H. Devereux; J. S. Ely, New York; T. B. Fairchild, Cuyahoga Falls, Ohio; Silas Farmer & Co., Detroit, Michigan; Collins French, East Rockport, Ohio; Burr K. Field, Baltimore, Maryland; General M. F. Force, Cincinnati, Ohio; Hon. G. H. Foster, Miss L. T. Guilford, Dr. Samuel A. Green, Boston, Massachusetts; S. O. Griswold, C. A. Hawley, Girard, Ohio; Mrs. O. E. Huntington (28 bound volumes, 221 pamphlets and papers), Gov. Hartranft, Harrisburg, Pennsylvania; Franklin B. Hough, Lowville, New York; W. C. Howells, Toronto, Canada; Colonel W. H. Harris; Peter G. Hitchcock; John G. Henderson, Winchester, Ill.; H. C. Hawkins; Ingham, Clarke & Co.; H. N. Johnson; Mrs. Fred Judso; John P. Jeffries; Kansas State Hist. Society, Topoka, Kansas; John Kirkpatrick; John Jay Knox, Washington, D. C.; Frederick Kinsman, Warren, Ohio; R. T. Lyon; J. T. Langstreth, Philadelphia, Pennsylvania; A. P. Leland and Son; Cleveland Leader Company; State of Michigan, Lansing, Mich.; R. D. Mix; Ebenezer Merry, Sandusky, O.; Massachusetts Historical Society; J. P. Maclean; Colonel Robert C. Morgan; Henry Manning; Hon. Eben Newton, Canfield, O.; A. T. Nye, Marietta, O.; United States Naval Observatory, Washington, D. C.; Onida Historical Society, Utica, N. Y.; S. H. Prentiss; Capt. A. C. M. Pennington, U. S. A.; S. E. Prentiss; F. W. Putnam, Salem, Mass.; Wm. Payne; State Pioneer

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Vice President—J. H. Salisbury; E. Sterling and William Perry Fogg.
Secretary—C. C. Baldwin.
Treasurer—S. Williamson.
Librarian—Mrs. J. C. Schermerhorn.
Legal Trustees—William Bingham, J. P. Bishop, George Willey.

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Local History—C. C. Baldwin, L. F. Bauer.
Genealogy—S. Briggs, S. O. Griswold, P. Hatcher, H. G. Cleveland.
Coins—H. N. Johnson.
Autographs and Manuscript—H. L. Robinson.

CURATORS ELECTIVE.

Term expires in 1880—H. N. Johnson, D. Eells, G. E. Herrick.
1881—C. C. Baldwin, G. H. Stone, L. Little.
1882—John W. Allen, Joseph Perkins, Colonel Charles Whittlesey.

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W. J. Boardman, James Barnett, William Bingham, H. M. Chapin, B. A. Standard.

PATRONS.

Leonard Case, William J. Gordon, Joseph Perkins, John F. Warner.

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J. H. Devereux; L. C. Draper, Madison, Wis.; John Erwin; M. F. Force, Cincinnati; A. W. Fairbanks; William P. Fogg; J. A. Garfield, Hiram; Theodatus Garlick; W. J. Gordon; Miss L. T. Guilford; C. F. Glaser; T. P. Handy; S. V. Harkness; W. S. C. Otis; Douglas Perkins; George T. Perkins, Akron, O.; Jacob B. Perkins; Joseph Perkins; Joseph Perkins, Jr.; L. Lewis Perkins; F. W. Putnam, Cambridge, Mass.; Rufus P. Ranney; J. D. Rockefeller; J. H. Salisbury; John H. Sargent; H. A. Harvey, C. C. Hale, Peter M. Hitchcock, L. E. Holden, Frank B. Hough, Lowville, N. Y.; Colgate Hoyt, Miss M. E. Ingersoll, H. N. Johnson, Mrs. F. Judson, C. O. Scott, W. H. Smith, Chicago; Silas M. Stone, W. S. Streater, John Tod, Amos Townsend, J. J. Tracy, J. H. Wade, H. P. Weddell, George Willey.

DECEASED LIFE MEMBERS.

T. S. Beckwith, J. P. Kirtland, L. L. D., General L. V. Bierce, Judge Wm. G. Lane, William Collins, T. M. Kelley, I. A. Lapham, L. L. D., R. W. Taylor, R. P. Wade, H. B. Tuttle.

ANNUAL MEMBERS.

Linus Austin, James Barnett, Levi F. Bander, William Bingham, Samuel Briggs, John W. Brown, D. D., S. A. Boynton, M. D., George P. Burwell, W. S. Jones, J. S. Kingsland, Thomas Kilpatrick, James W. Lee, Frank Lynch, Lyman Little, D. M. Marsh, L. McBride, E. I. Baldwin, W. H. Harris, C. H. Bill, Elijah Bingham, H. W. Boardman, S. Burke, C. C. Carlton, S. Chamberlain, H. B. Childs, H. G. Cleveland, B. S. Cogswell, Colonel C. H. Carlton, E. D. Childs, J. D. Cleveland, B. J. Cobb, F. A. Marble, Columbus; W. H. McCurdy, Mrs. J. M. McDermott, G. G. Norris, Charles A. Otis, Charles Paine, Dr. H. Parker, Berea; W. H. Price, R. C. Parsons, Edward W. Cobb, C. J. Constock, James W. Craig, S. H. Curtis, W. L. Cutter, J. Colwell, T. D. Crocker, Alleyne M. Cushing, W. J. Dickinson, D. P. Eells, Alfred Eyears, George H. Ely, I. D. Faxon, J. Newton Frazee, George W. Pack, William Payne, H. C. Ranney, Harvey Rice, Ralph R. Root, W. C. B. Richardson, E. S. Root, N. Schneider, M. D.; George A. Stanley, George Short, J. Clinton Saxton, H. Stephens, G. H. Stone, Amasa Stone, Jr., L. W. Ford, George W. Gardner, S. O. Griswold, S. C. Greene, H. R. Groff, H. C. Hawkins, John Hay, W. F. Hinman, W. H. Huntington, Henry R. Hatch, A. M. Harmon, G. C. F. Hayne, G. E. Herrick, Hopson Hurd, J. E. Ingersoll, Joseph Ireland, S. C. Smith, William Taylor, J. W. Tyler, V. C. Taylor, T. H. White, E. N. Winslow, N. H. Winslow, Buffalo; A. J. Williams, S. E. Williamson.

MORTUARY RECORD.

Judge Thomas M. Kelley.

Judge Kelley departed this life on the 9th of June, 1878, at an advanced age, his sands of life having literally run out. He came to Cleveland with his father, Daniel Kelley, in 1810. Daniel Kelley was President of the village corporation from 1816 to

1819, inclusive. Alfred Kelley, an elder brother of Thomas M., was the directing mind of the construction of the Ohio Canal. During the principal part of his active life Thomas was a merchant, with various partners. For a long time they occupied a store on the south side of Superior street, where the Athenaeum is now.

In later years, having accumulated a good estate, Mr. Kelley devoted his time and means to the Merchants', afterward the Merchants' National Bank. Under the old Constitution of Ohio he was elected an Associate Judge of the Court of Common Pleas for the usual term of seven years. He not only witnessed the growth of Cleveland from a sickly, struggling village to a first-class city, but contributed materially to its growth. He was among the first of our life-members, and took a lively interest in the growth of our society.

Hon. William Collins.

Though Mr. Collins came to Cleveland a young man, he had then served a term in Congress from the district of Silas Wright, in Northern New York. He was, of course, a Democrat in politics, but agreed with Mr. Wright on the Storey question, on which he made an able speech in the House. This brought Mr. Collins with Mr. Van Buren, Mr. Chase, Mr. Wright, into the ranks of the Free Soil party. Soon after his removal to Ohio he was married to Miss Jane Kelley, daughter of the late Alfred Kelley. An elder brother has been a Judge of the Court of Common Pleas in Cincinnati, while a younger brother is now Mayor of Columbus, Ohio.

From the outbreak of the rebellion he sided with the Republican party and took an active part in sustaining the Union troops.

The following tribute will be found in the *Cleveland Herald* of June 19, 1878. "His health always excellent, his temperament calm and quiet, his personal habits regular as the clock, his mind closed to distracting business cares and pecuniary anxieties, surrounded with all the comforts a rational fortune could insure, there seemed every reason to suppose he would live long to enjoy the happiness and satisfaction of a vigorous, healthful old age. But man proposes and God disposes, and almost without warning he was stricken down while surrounded by his family, and, after a few moments of distressing suffering, suddenly died. Cleveland has sustained a serious loss in Mr. Collins' death. Though a remarkably retiring, modest man, he has long been connected, through the Merchants Bank and the railroad companies, with the most important business interests of our city. His judgment was exceedingly clear, judicial, comprehensive and valuable. He was a man of industry and detail, and in his profession at the Bar he always held the respect of his brethren as a lawyer of cautious, prudent, methodical habits, whose

opinion was valued upon any subject which he had given his attention. Though not an orator or speaker of magnetic power he was always logical, direct, pertinent and forcible. His character for integrity was never questioned, and he was held in high personal esteem by all who knew him."

The death of Mr. Collins occurred suddenly on the 18th of June, at the age of sixty years.

Judge Charles T. Sherman.

In the early hours of the first day of 1811 Judge Sherman was seized with severe pain in the chest, probably at the heart, from which he died before dawn of that day. He was the eldest son of Judge Charles T. Sherman of the Supreme Court of Ohio, who located at Lewiston, Fairfield county, Ohio, in the spring of 1811, from Norwalk, Connecticut. There are different statements of the date of the birth of Charles T. Sherman. The latest one places it on the 3d of February, 1811. Having graduated at the Ohio State University at Athens, he studied for the law, he opened an office at Mansfield in 1834. His brother, John Sherman, now Secretary of the Treasury, afterwards became a partner.

"As soon as this Society was organized in 1867, Mr. Sherman became an active member, and his interest in matters pertaining to local history never flagged while he lived. We cannot do better than to give from the *Cleveland Herald* of January 2, a brief account of his most prominent personal characteristics: "In 1854 the partnership of the Sherman brothers was dissolved by the departure of the present Secretary of the Treasury for his seat in Congress, but Judge Sherman remained in Mansfield, off and on up to the time of his appointment as Judge of the United States Court at Cleveland in 1857. In 1862 Governor Tod appointed him Colonel of the camp of rendezvous at Mansfield, and near the close of the war he received an appointment from President Lincoln as one of the Government Directors of the Union Pacific Railroad, which was then in process of construction. This office he held for four years, and at the termination of it he came to Cleveland, as above stated, in the spring of 1867, to take a seat on the bench of the United States Court. He continued to act as District Judge up to 1873, when he resigned his position and retired to private life. Since that time he has been living in Cleveland, and has been entirely disconnected with business affairs.

"Judge Sherman was, in the opinion of the Cleveland Bar, as expressed yesterday afternoon to a reporter by a prominent member of it, a Judge of considerable ability, a man of genial manners, full of kindness, and generally liked by the Bar throughout his district."

After the election of three curators the meeting adjourned.

WESTERN RESERVE

— AND —

Northern Ohio Historical Society.

TRACT NO. 49—October, 1879.

TALLMADGE, June 7, 1879.

COLONEL WHITTLESEY, President of the Western Reserve Historical Society, Sir:—I send you my notes respecting the "Girdled Road."

On February 23d, 1797, the Connecticut Land Company appointed a committee whose report is as follows:

To the Gentlemen, Proprietors of the Connecticut Company, in meeting at Hartford, Connecticut:

Your Committee appointed to inquire into the expediency of laying and cutting out roads on the Reserve,

REPORT.

That in their opinion it will be expedient to lay out and cut out, a road from Pennsylvania to the City of Cleveland, the small stuff to be cut out: 25 feet wide, and the timber to be girdled 33 feet wide, and sufficient bridges thrown over the streams as are not fordable, the said road to begin in Township No. 13 in the first Range at the Pennsylvania line, and to run westerly through township No. 12 in the second range, No. 12 in the third range, No. 11 in the fourth range, to the Indian ford at the bend of Grand river; thence through township No. 11 in the fifth, and also No. 10 in the fifth range, No. 10 in the sixth range, No. 10 in the seventh range, No. 10 in the eighth range, and the northwest part of No. 9 in the ninth range, to the Chagrin river, where a large creek enters it from the east; and from the crossing of the Chagrin the most direct way to the middle highway, leading from the city of Cleveland to the hundred-acre lots. Submitted with respect by

SETH PEASE,
MOSES WARREN,
WM. SHEPARD, JR.,
JOSEPH PERKINS,
SAMUEL HINCKLEY,
DAVID WATERMAN.

} Committee.

HARTFORD, Jan. 30, 1798.

This road was cut out and the timber girdled according to the recommendation of the committee. It is known in Leroy and Concord in Lake county, as the "Girdled Road." The lots of land were surveyed to this road, and the early deeds given were bounded on it in the above mentioned townships. If an investigation was made it might be found the same in the other townships. I have given this subject some attention; I will give you the results: From a little west of the village of Willoughby to Cleveland, it ran on or near the present traveled road. The middle highway which is mentioned in the report of the committee, is Euclid street. That this was the first road that was laid out and cut out on the Western Reserve, there is no doubt. This was all done at the expense of the Connecticut Land Company. The present names of the townships this road passed through, beginning at the Pennsylvania line are as follows: The first is Conneaut; the second Sheffield; the third Plymouth; the fourth Austinburg, and in this town was the bend of Grand river, and the Indian Ford, also the location of Austin Mills, at this time known as Mechanichsville. The fifth town Harpersfield, crossing the southeast corner of the town. Thence crossing the northwest corner of the sixth township which is Trumbull. Crossing the county line into the seventh township which is Thompson in Geauga county. Thence into Leroy, in the county of Lake, which is the eighth township. The ninth township is Concord; the report says across the northwest part of No. 9 in the ninth range, Kirtland. I have met several persons of our age whose fathers were the early pioneers, but there is a difference of opinion; in Thompson where it is vacated but is easily traced in the timber land. What is known as the plank road leading from Painesville to Warren, at a point about three-fourths of a mile southeast of Warren Mills, in Leroy, is the Girdled Road, to the forks of the road west of the Brakeman Meeting House, in the south part of Leroy. From the

forks of the road above mentioned it is traveled at the present time, to where it crosses the state road from Painesville through Hampden to Warren. From there west it is not much traveled for a mile or two. It crossed the road leading from Painesville to Chardon, about a mile south of Wilson's Corners at a place fifty years ago called the Log Tavern. East of the Corners about 40 or 50 rods, Messrs. Thomas Murray and Willis Woodruff, pointed out the spot known in early days as "Perkins' Camp." It was in the log cabin of Richard Gifford that the first election for the northern district of Trumbull county, for the townships of Richfield, Middlefield, Painesville and Cleaveland for a delegate to the Territorial Legislature and also delegates to the Constitutional Convention on the second Tuesday of October, 1802, was held. I have correct information that three persons whom we personally knew voted at "Perkins' Camp," viz.: Captain John Wright and John Wright, Jr., from Morgan, and Ephraim Clark, Jr., at that time living in Burton. Just think of it, how dear the right of suffrage must have been to these hardy pioneers to go from Conneaut, from Cleaveland and as far south as Burton and Mesopotamia on foot to vote! Think of the hardships some endure at the present day to go as many rods as they went miles! Moses Cleaveland, Joseph Perkins, and Daniel L. Coit, by Simon Perkins, Agent, deeded to Richard Gifford 67 50-100 acres, lot No. 4 Concord, on the road cut out from the Cuyahoga to the Pennsylvania line, being on

the south side of said road, dated November 10th, 1803. June 1st, 1876 in company with Messrs. Murray & Woodruff we traveled the "Girdled Road" west from the road leading from Painesville to Chardon. Mr. Woodruff said: He came from Colebrook Corner in 1822, and bought his land of General Perkins on the south side which was deeded to the south side of the "Girdled Road." Mr. Woodruff says that when he bought there was a very thrifty growth of young timber where the timber had been cut and girdled twenty-five years before. After passing Mr. Woodruff's residence the road still traveled until it strikes the town line between Concord and Chardon, a mile or more east of the corner of the towns. From this point the road is vacated across the farm of Mr. Webster and over Little Mountain. Mr. Webster lives in Chardon township, and on going across his farm into the woods the trace of the road was found easily and followed across the mountain by the timber. There are breaks in the ledge on each side which make it comparatively easy to get to the broad plateau on the top. South of the buildings it goes off the Mountain on the west side near the residence of Edwin Ferris Esq. From there to Chagrin there does not appear to be any one that can locate the road at all as yet. Thinking there might be some things of historical interest to you, I send for what it is worth. Yours truly,

C. C. BRONSON.

MAJOR WILKINS' DISASTER, 1763.

EAST ROCKPORT, January 11, 1836.

Colonel Charles Whittlesey:

DEAR SIR:—On arriving at home a few days since, after a three months' absence, I received yours of the 10th of December. I am greatly obliged for the information it contained in regard to the disaster which befel Major Wilkins' Expedition in 1763. I had come to the conclusion that its locality was at the mouth of Rocky River; several circumstances seemed to confirm it especially the discovery there, adjacent to an old camp fire, of a surgeon's amputating knife and other implements (Wilkins' surgeon was drowned) and a "Point of Pines" still exists a little to the east of Rocky River (Wilkins was wrecked at a bluff just beyond a "point of pines.") But you once informed me that you supposed he was lost on the north shore of the Lake and in your letter you state that he was wrecked by a violent *Southeast* wind. With such a wind I see not how he could have suffered much off the mouth of Rocky River. To-day in searching a recent map in Bell's History of Canada, (2 vol. Montreal, 1866), I find "Point aux Pins" laid down on the Lake shore in the town of Shrewsbury, Kent District, Canada, opposite Cleveland, a little further east.

These facts lead me to entertain doubt which of these two localities was the one where Wilkins suffered. I wish you would turn your attention to this point. The Major Moncrieff of whom you wrote was second in command under Wilkins. He addressed a letter to the commander at Detroit, written half in Erse, half in English, informing him of the details of the disaster and the conclusion to return the expedition to Niagara. He took an active part with the Tories in New York at the breaking out of the revolution, and subsequently at Savannah and Charleston as lieutenant-colonel of engineers died at New York 1791, and was buried in Trinity Church. On examining the monuments there three weeks since I did not discover his. He was an uncle of General Montgomery and brother-in-law of John Jay and Gov. Livingston, of New Jersey. His daughter was the beautiful girl seduced by Davis and denied by Porter, to be seduced by Aaron Burr. The wreckage of Bradstreet on McMahon's beach in 1764 is certain. It is a query whether the sword, bayonets and gun-flints discovered on the beach at Rocky River, and the camp-fire knife, bayonet, &c. on the plateau near Tisdale's point were the vestige of his or Wilkin's catastrophe. During my recent tour I secured several additional facts relating to Bradstreet's expedition at Hartford, at Boston and New Haven.

Very truly yours,

J. P. KIRTLAND

DIARY OF CAPT. JAMES BONNER.

Vol., War of 1812, from October 3, 1813, to 22d of April, 1814—
Upper Sandusky and Fort Meigs, Ohio.

October 3, Reorganized at White's; 4, To
McGuire's; 5, To Bramley; 6, To
ville; 7, To Mercer; * * * 12,
burgh; * * * 23, Cloudy to
Lisbon; 24, Encampment in same val-
djoining New Lisbon, the capital of Co-
lana county, Ohio State. It lies on the
branch of Little Beaver creek, about
y miles from its mouth; contains about
dwellings, and appears flourishing.
* 27, Cloudy. Canton, Stark couns-
on Nimishillon, twelve miles from its
ion with the Tuscarawa. The circum-
land is good, abounding with black
nt, hickory, etc.; however, the site of
llage (which contains about twenty-five
irty houses) is on a large plain, called
me Tuscarawa Plains, as it extends to
river, being about eight or nine miles;
oraces Lake Scippo *alias* Sampson, one
one-half miles long and of equal
th; three miles from town the outlet
beautiful stream, on which lies Ran-
burg. * * *
7. 1, 2, 3, 4, Worcester, situate on
creek, a branch of Tuscarawa, and
a mile from its junction; it is the
l of Wayne county, and contains
taverns (without liquors), a store (des-
of goods), a block-house, a stable, a
n and a corn crib,—“not a bad size
two-year-old.” Our battalion outrun
hing on foot and “worked the troop”
having gained two days in five days’
after leaving Pittsburgh. In our
progress I overtook a most afflicting
it settled in my jaw, and gave me the
che almost to distraction. I this
ing suffered extraction, and found
relief in my suffering. 6, Rain; to
ick, a deep, still water three and one-
eet, with large bottom and very
much difficulty in passing it. Two of
en killed a rattlesnake of the Mas-
a kind. * * * 8, Mohickan
omes: Sunday. 9, Lay by making a
k. 10, Passed the town eleven miles.
eentown; these towns in ashes; fair;
a snake was seen. 12, Sleet; cold;
l the Black Fork of Mohickan, on
is an elegant bottom, with tolerable
l near it; spit snow; cold; crossed the
Fork of Mohickan and passed through
beech upland and black walnut bot-
three and one-half miles to Mansfield
posed seat for Richland county (it is
ed to Knox connty; seat, Mount Ver-
hen organized it contained one house,
ock houses, one walled cellar, three
ng cabins, where whiskey is sometimes
e nursery of peach trees, etc., etc.
mpany lying in camp. It is custom
detachment to name the camp after

the officer of the day preceding its formation.
13, Snowed about an inch deep (froze pota-
toes). 15, Went away; a fine day and
cold nigh. 16, Snow in the morning, a
fine day succeeds. * * * 29,
Set out for Sandusky; most tremendous
storm at one and one-half at day break
carried away tents, cloths, etc., blew down
trees, killed one man, and severely wounded
four, broke four muskets, hurled canteens
and other property into tents belonging to
Capt. D.’s company, rocked down two tents
and broke four muskets in Capt. Huffs.
Snow in the afternoon. 30, cloudy; snow at
night; beech swamp.
* * * Nov. 5, Snow. 6, Clear.
Sandusky plain; a grand prospect. 7,
Snow; cross a branch and back to the
plains. 8, rain; crossed creek and
back. 9, Clear; snow. 10, Cold. 11,
Colder. 12, Coldest; (encampment on the
bank of Sandusky, about six miles above
the upper town called Negrotown, fifty
miles from Lake Erie). 13, Moderating.
14, Moderate; cloudy; (moved to
Block House one-half mile where there
are some Indian huts). 15, Snow;
clear. 16, Cloudy. 17, Thawing. 18,
Moderate; (to a cranberry marsh two
miles. We get abundance of elegant fruit).
19, Cloudy day and frosty night. 10, Sun-
day, resting ourselves. 21, Clear; moder-
ate; wideawake. 22, A white buckskin
brought in by the Indians, sold for two
dollars; cloudy. 23, Cloudy; still thawing
a little on days. 24, Clear. 25, Almost a
green Christmas, particularly on the plains.
26, The snow on the timberland three or
four inches deep. 27, 28, Weather remark-
ably pleasant to the end of the year *
* * 30, A beautiful warm clear
day, Capt. Jenkins being on a scout yester-
day found a bee tree by the flying of the
bees; snow entirely disappeared; thawing;
waded to the marsh and back.
Jan. 1, 1814, Cloudy; bees flying; a
snake killed; rain. 2, Snowed about
eighteen inches deep. 3, Clear; cold. 4,
Clear; a commotion observed to the west-
ward; colder in the night accompanied by
a sound resembling distant thunder. 5,
same; 6, cold; cloudy; snowed; moder-
ate. 7, 8, Same; cleared up; blustering;
squally; a hand frozen; seventeen cannon
carriages arrived. * * * 17,
Clear; moderate; thawing very little and
frosty nights with fine day until the 23d;
moderating; came on rain at dusk a wet
night. * * * 24, With power-
ful rain; snakes driven out of their dens by
the innudiation and killed by the soldiers,
of course, died honorably, being killed in
war; com.; snowing at midnight. 25, A

snowy, windy, disagreeable day. 26, Cleared off with about a foot of snow. 27, 28, 29, 30, Clear and cold; moved to block house. 31, Snow; picketed in the block and store houses containing nine thousand bushels of oats and corn, three hundred bushels of flour, exclusive of military stores; named it Ft. Ferie?

Feb. 1, Clear fine morning; overcast; rained; 2, then snowed an inch. * * 21, Fine day and frosty night, with the appearance of snow having fallen at morning, at which time it was five inches deep at the Miami rapid to the 24th. 25, Clear and extremely windy; set out for the rapids to Tiomaughty (Tiamochte)—nine mile plains; thence to carrying; (Portage) river very swampy (two miles of black ash, called the Black Swamp); beech and sugar lands twenty-five or thirty miles, except on the river bottom, where there is some black walnut, and we took some honey out of one; thence eighteen miles up to Miami, black ash, swamp and open prairie; arrived at Miami rapids March 3rd amidst water, mud and snow, it having snowed every night

this month, with moderate clear days. March 4, Cool; windy; clear; overcast. 5 and 6, Cold and cloudy. 7, Snow at night. 8, Clear; sugar water running; 9, Same. 10, Ice broke at the rapids, and drifting in a wonderful manner.

* * * April 3, One man killed and scalped, and another taken prisoner within 200 yards of the garrison; came on rain. * * * 17, Settling off with Uncle Sam. 18, Set out from Ft. Meigs; destroyed several, and saw three enemies; moderate fine weather. 19, Lodged on Mouse Island; a wet night; had the best accommodation the wilderness afforded. 20, Missed our latitude in a great storm of wind, rain, etc., and affected landing at the mouth of Pipe Creek, in Sandusky Bay; the ground was bad: * * * weather bad, and slept bad. 21, wet raw day; drew back rations of sleep. 22, Clear with a sharp east wind; volunteered to go around the point; an alarm with a boat, but no fight: consequently a false alarm; lay wind bound at the point.

PAPERS ON THE FRONTIER TROUBLES. 1787—1813.

Letter of *John Adams*, Minister to England, Dec. 1778:

"If England can bind Holland in her shackles, and France, from internal dissension, is unable to interfere, she will immediately make war against us. No answer is made to any of our memorials or letters to the ministry, nor do I expect that any will be while I stay."

Col. McKee, Supt. Indian Affairs, Aug. 30th, 1794, to *Col. England*, commanding at Detroit, found among Gen. Proctor's papers seized at the battle of the Thames:

"Everything had been settled prior to their leaving the fallen timber, and it had been agreed upon to confine themselves to taking convoys and attacking at a distance from the forts if they should have the address."

August 11, 1794.

"Scouts out; sent up to view the situation of the American army, and we are now mustered 1,000 Indians."

President Washington to Mr. Jay, August 30th, 1794.

Gov. Simcoe had sent a protest by Lieut. Sheaffe against an occupation of land near the forts not yet surrendered:

"This may be considered the most open and daring act of the British agents in America, though not the most hostile and cruel."

"All the difficulties we encounter with the Indians, their hostilities, the murder of helpless women and children along our frontiers, result from the conduct of the agents of Great Britain in this country."

"It is undeniable that they are furnishing the whole (Indians) with arms, ammunition and clothing to carry on the war."

Gen Winchester's report to Secretary of War:

"No longer hoping anything from the intervention of General Harrison, half our force captured or dispersed, anticipating only the slaughter of those within the picket who yet bravely hold out, and assured by Proctor that on a surrender he would give honorable terms, I advised this measure."

ARMSTRONG'S WAR OF 1812—JAN. 17.

"The effect of this disaster on General Hull was not such as might have been expected from long military, or high military character; and probably produced the first doubts that existed of his capacity as a leader. Instead of exciting increased spirit and exertion, which would soon have compensated for the loss, and atoned for the disgrace so unexpectedly incurred, he unfortunately saw it only in the light of an evil omen and precursor of an attack, fatal alike to object and agents of the expedition, and accordingly employed himself in imagining and practicing devices to avoid a battle, which all circumstances, time, place and relative strength, made it his duty to seek. Nor were his stratagems on this occasion unavailing, the enemy suspected his strength, and permitted him to reach Detroit without molestation or menace."

WESTERN RESERVE

AND

Northern Ohio Historical Society.

TRACT No. 50.

INDIAN NARRATIVE OF JUDGE HUGH WELCH, OF GREEN SPRINGS, SENECA AND SANDUSKY COUNTIES, OHIO.

PREPARED FOR THE SOCIETY BY C. C. BALDWIN.

Green Spring is a well known sulphur spring in the township of Green Creek, on the edge of Sandusky and Seneca counties, Ohio. The county line runs along a principal street in the village. The spring is large enough to become at once a small river and to run a mill. A more quiet place for rest, yet within easy reach of business, cannot well be found. A most comfortable, roomy hotel is close by the spring, surrounded by a grove of trees, where, in former times, the Indians had a corn field.

In September, 1817, General Cass and Duncan McArthur negotiated at the foot of Maumee Rapids a treaty with the Wyandots, Senecas, Delawares, Shawnees, Potawatomes Ottawas and Chippewas, by which all their lands in Ohio were ceded to the United States. There was granted, however, to the chiefs of the Senecas thirty thousand acres lying on the east of Sandusky River, and in 1818 ten thousand acres more were granted. The whole tract was called the Seneca Reservation, and gave name to Seneca county. In 1881 these lands were ceded to the United States, and the Indians were removed west. The springs were on the edge of this Reservation, and the Indians were familiar with their medicinal qualities before the whites were.

There are some traditional stories of the Indians in connection with the springs of little value. The whites, however, settled early near them, and were well acquainted with the Indians, and there are still living old pioneers in the vicinity who knew them well.

One of the most intelligent men of the vicinity is

JUDGE HUGH WELCH,

who lives in the Seneca county part of Green Springs, a brother-in-law of General William H. Gibson, of Tiffin. A tall, erect, fine old gentleman, born in 1801 in Little Beaver, Beaver county, Pennsylvania. In 1815 two brothers came West and selected land in Bronson, four miles west of Norwalk. Hugh returned to Pennsylvania, thence again to Ohio the next year, when he found one hundred Indians encamped on or near the Vermillion River engaged in trapping and making sugar. The following is his narrative:

My brother Thomas had, the first season, shot fifty deer and trapped one hundred and thirty coons. The Indians were Senecas with some Oneidas, and encamped just where the trail crossed the river. I came on the trail, starting from the Portage on the Cuyahoga, coming to Norwalk, and they were close to it. I think the trail ran a little south of Berea and the towns along the railroad. I think it ran through Townsend. The underbrush and small timber were cut out so that wagons could pass. It was made by some branch of the army in 1812. A

regular Indian trail was beaten by travel in single file. They all traveled the same path. I have traveled a hundred and fifty miles in Michigan where the path was all beaten down like a sheep path. The Indians here were mixed a good deal—Senecas, Oneidas, Mohawks, and Wyandots. They did not speak alike, but could understand each other. Their languages were very different. For instance the Wyandots called tobacco ha-mah-mah; the Senecas and Mohawks, mah. The Mohawks called a knife, winnasrah, accenting the last syllable, while the Senecas accented the one before it. I settled in Eden, Seneca county, in 1819; my near neighbors were Indians for twenty miles. The Indians of that county were Senecas and a few Mohawks; they lived in their villages. Quite a number had shanties of twelve-foot poles, they were notched at the corners like a corn-crib and covered with bark. Some poles placed standing would be cut on the inside by a wedge-shaped cut as the eaves, so that the top would bend to form a slanting roof, which was completed with bark. They lived in them winter and summer, except when hunting. They went off to make sugar, to trap and to hunt deer. There was abundant game on the Reserve—deer, bears and wolves. Game was more plenty there than further west, where there were more Indians. Most all the Indians had ponies. There were many. I never knew of any buffalo in this vicinity or any beaver or prairie wolves. I think there were beavers, but very scarce. There were many wolves. The Indians lived much on venison. They killed all they could during the winter. They jerked the meat; that is, laid it on poles over the fire as soon as the deer got into condition, say May or June. The deer became poor when the snow was on the ground. The Indians also killed raccoon, turkeys, etc. In May they used to kill deer again, fawns, etc. They used calls for deer; they used to call turkeys with the bone of the wing; they sucked the wind in hiding behind a log. They imitated the hen, which was just like a tame turkey. You would not know the difference. The deer call was something like a hollow reed. It was about three or four inches long, and sounded like a young fawn blating ma-a-a-a. A part of the wood was taken out, a little thin bit of silver or other metal fastened over the slit or hole in one side, and the sound came out through it, shaking the little plate of metal. They blew to sound the deer whistle.

They had no grain save corn, which they raised in little patches. Some would raise corn on a quarter acre to live on all winter. They usually took off the hull with lye; they used to boil it whole when treated with the lye. Sometimes they pounded it and sifted it through a skin with holes punched in it and made bread, and boiled the coarser for hominy. To pound it they would chop a piece of timber off square, say three feet high, burr out the center, and by that and hacking would make a perfect mortar.

For a pestle they used a piece of hard or iron-wood rounded at the ends—made heavy and egg shape at both ends—and the corn was struck with the smaller end of the pestle. I never saw them use stone pestles. Squaws did the work.

They generally boiled the corn, especially if they had meat with it. They raised beans and sometimes cooked them with corn. They generally ate one article at a time.

Their corn was with eight rows, long-eared and sometimes entirely blue, some almost black, some mixed white, blue and black. It was different from any I ever saw elsewhere. It is raised here now sometimes, the seed having come from the Indians.

They used for cooking copper or brass kettles. Some held ten or fifteen gallons. These were used especially for making sugar, also for hominy.

They made sugar a good deal and put it with their corn and bread. They frequently parched corn and pounded it up. They used it if going on an excursion, wetting it and putting sugar with it.

They ate sometimes by themselves, but often the whole crowd together, especially relatives.

In making sugar they used small hatchets. I did not for a long time see an ax such as we have.

They used when deer went into the river to get rid of mosquitoes to come at night in their canoes with a candle of wax at the bow, and the deer seemed blinded. The Indian could go very close to shoot them.

They used canoes made of elm bark braced with little poles bent in proper shape. Their sugar troughs were of bark, thinner and tied at the ends.

Basswood bark would make as strong a string as hemp by soaking in water for two or three months. I never saw any cooking by dropping hot stones in bark vessels. If they had no kettle they would cook on a forked stick over the fire, eat what was cooked, and then cook again. They could then only roast corn. They

re very fond of roasting-ears, and ate a great many.

If they were very hungry, they would cook old deer heads, that were anything but savory.

They had a few apples along down the river. There are trees, but not many, on the Wyandot reservation, planted perhaps a hundred years ago.

I saw little of Wyandots here; never any Shawnees. There were Senecas, and when I first came here Mohawks. Some married in other tribes.

The boys used bows and arrows to shoot with. So did I. They pointed them.

When the Indians wanted to shoot low, they had their arrows with heavy steel points, bought ready-made.

They shot squirrels with a blunt wooden point. On the blunt arms they did not generally use feathers, but did always on the sharp. The feathers were put on like rifle-bail, with a twist. Grown Indians used mostly the rifle, but boys bows and arrows until fifteen to eighteen years of age.

The Indians used to smoke tobacco in the bark of the Wahoo, called by them Cannakanick. They often mixed with the tobacco. They also smoked the bark of a species of dogwood. We used to call it in Pennsylvania the arrow-rod, from the shape of the sprouts.

They used to tan green hides; if dry they used to soak them in the water of a running stream; they then stretched it over a smooth log the size of a man's leg, and with a knife blade placed in a curved position would scrape off all the hair and the outside skin, which will curl up, then scrape off all the flesh and dry the skin perfectly dry. They then soaked them in deers' brains and warm water, washed and worked into a sud, one or two days, and then dressed them by rubbing with a stone much like those dressed axes plowed up in the fields, often splitting the skin. They then made a fire in the ground eighteen inches in diameter, and suspended the skin on sticks radiating up, and smoked them by burning rotten wood until the color suited them. They were then ready for use.

When I first knew the Indians the men dressed in moccasins, leggins, a calico shirt reaching to the knees or hips, and wore a jacket or some garment. The principal dress, however, was one of the Indian blankets fastened with a belt. The arm was protected with deer skin in brush in the woods. They wore moccasins, and ornaments on the breast. The squaws wore broadcloth large

enough to fasten with a belt at the waist. Above that they wore a jacket; they had moccasins and leggins. They wore hats got from the whites, when they could get them, otherwise nothing. Leggins were worn much by the whites. Rattlesnakes could not well strike through them. There were many snakes in Huron county; it was not uncommon to hear them hiss when we went to hitch a chain to a log. The Indians were fond of paints, using them especially in their war dances; for red they used blood root; for yellow some other root, the name of which I do not remember; for black they used coal, or some other black substance mixed with grease or oil.

They used as games running, wrestling and running horses. I never saw them play ball much. The Wyandots' graves at Upper Sandusky were like the whites. The Mohawks along Honey Creek made holes, laying down poles or slabs, making a kind of box in which the body was placed and then covered. The Sauks, Foxes and Potawatomes buried by setting the body on the ground and building a pen around of sticks or logs. I think the bodies lay heads to the east. I never saw the Senecas bury.

Mohawktown was four miles southeast of Tiffin, on Honey Creek, about three-fourths of a mile from Sandusky River. Among the Mohawks were Brants; Thomas, who was Captain on the American side in the war of 1812, and his brothers Powlas and Isaac. They all fought on the American side. Van Metre, a principal chief, a white, captured when a child, married their sister, and lived there also. The Brants were all large stout men.

I knew well Charlieu†, who was uncle to the Brants. The whites called it Charlo, the Indians Challieu, giving the French sound. Both accented the last syllable.

I knew Charlieu well. In the spring of 1819, he had a little shanty adjoining his neighbor. I then visited Mohawktown. He was about six feet high, well-built, straight, then an old man. He was

† NOTE.—In the museum of the Historical Society is a pipe tomahawk of iron, inlaid with silver and with Masonic emblems. It is marked "Captain Charlo." It was believed for awhile to have been the property of this Charlo or Charlieu. It was found in a grave below Toledo on the Maumee. It is now believed to have belonged to a Potawatomie chief, "Captain Charlo," who lived in the vicinity. The Mohawk could not have owned it, and it certainly could not have been found in his grave. He died in 1832, in St. Louis, and was buried there.

sulky and little inclined to talk with any, and especially with whites. I often tried to talk with him, but could not.

He lay in his bunk of skins smoking. He was dressed in perfect Indian fashion. He got his blanket from the British and every year a present. He was a very prominent Indian, but I never heard him called Captain. It was said his pouch for bisred paint was made of a child's leg. I think it was a deerskin. Once a year he went to Malden. He had here no wife or child, and was not much liked. Even his nephew did not speak well of him. They said he was too much British.

At one time I attended a Wyandot war dance with Isaac Brant. The young men were very fierce and acted as if in war, and scalping and killing. It was in a large tent put up with bark poles. Their tents were small, not over twelve to fifteen or sixteen feet, except the council houses, which were long. That of the Wyandots of Upper Sandusky were perhaps forty by twenty feet.

The Indian geographical names were nearly always descriptive. For instance, Tyamochtee means "a circle round a plain." I have this from Walker, the Indian interpreter. This stream is a branch of the Sandusky, a half or three quarters of a mile north of Negrotown.

Negrotown is eight miles north of Upper Sandusky. During the early settlements slaves ran away from Kentucky, and went among the Indians, and when I came here most of the inhabitants of that place were black.

The Indians pronounced "Sam-dous-ke." I remember when we lived in Huron county my father spoke of the Cuyahoga, pronouncing as we do now. Isaac Brant (a very jolly fellow) corrected him, saying Chris-a-wauga, and after that he called my father by that name. The Indians had generally but one name.

I don't know that I ever saw any medicine men, or knew any to follow that profession.

The Indians since I came took the lives of one or two for witchcraft. I heard, but I did not know of it personally. This was among the Wyandots.

In the fall of 1824, I went with my father-in-law, Colonel Gibson (father of General William H. Gibson), to Fort Wayne, where Indians were to receive annuities. On the northwest side of Coldwater River, in Michigan, we passed a grave of a chief buried lying down with poles notched over him. When we reached the other bank (Coldwater) a Frenchman told us the story. The Pot-

awatomies or Ottawas (the two nations were much mixed) lost a young chief. A council decided a woman had bewitched him. She hearing of it started off on a pony, but the Indians sent after her, and caught her near the Frenchman's home. Seeing escape impossible, she sat down on a log covering her head with her blanket and her face with her hands and an Indian coming behind split her head with a hatchet. She simply exclaimed *waugh (oh)*, and died.

In Fort Wayne a Potawatomie, or Tawa, was killed. The Shawnees and Delawares did not like them and had been drinking. One of the latter said "I will go out and kill that man," pointing to the old half breed across the street sitting on a log. The other said "If you are a man you will do it." He went out and the half breed buried his face in his hands intending apparently to keep still and let the Indian handle his weapons around him, but the Indian buried his knife in the heart of the half breed. The murderer was arrested and his relatives were there with their ponies decorated with bells, etc., and to buy him off.

William Walker was a leader among the Wyandots. He was a white captive when a child, and lived at Upper Sandusky. He married a half blood squaw, named Rankin, who was one of the most intelligent women on the Reservation. She told me in 1820 that the Wyandots had a tradition that there was a race, now extinct, of giants. Walker educated his boys and girls well. He was wealthy. His son William was government interpreter. The old gentleman was then eighty or ninety, his wife not so old.

I have heard young William Walker sing Indian songs. He translated one written by himself into English. It was called

THE WYANDOT'S FAREWELL.

"Farewell, ye tall oaks, in whose peasant green shade,
I've sported in childhood, in innocence played.
My dog and my hatchet, my arrow and bow,
Are still in remembrance, alas! I must go.
Adieu, ye dear scenes which bound me like chains,
As on my gay pony I pranced o'er the plains;
The deer and the turkey I tracked in the snow,
O'er the great Missi-sippi, alas! I must go.
Sandusky, Tyamochtee, and Broken Sword streams,
No more shall I see you except in my dreams.

Farewell to the marshes where cranberries
grow,
O'er the great Mississippi, alas! I must go.
Dear scenes of my childhood, in memory
blest,
I must bid you farewell for the far distant
West.
My heart swells with sorrow, my eyes over-
flow,
O'er the great Mississippi, alas! I must go.
Let me go to the wildwood, my own na-
tive home,
Where the wild deer and elk and buffalo
roam,
Where the tall cedars are and the bright
waters flow,
Far away from the pale face, oh, there let
me go."

I remember a poem William wrote
while at college:

"Oh, give me back my bended bow,
My cap and feather give them back,
To chase o'er hill the mountain roe,
Or follow in the otter's track.

You took me from my native wild,
Where all was bright, and free and blest;
You said the Indian hunter's child
In classic halls and bowers should rest.

Long have I dwelt within these walls
And pored o'er ancient pages long.
I hate these antiquated halls,
I hate the Grecian poet's song."

The tune seemed well adapted to the
words. The first song became quite pop-
ular among the whites.

The Senecas and Mohawks had songs,
but there was little meaning to them.
They used to call deer with a sort of
flute made of reed, blowing in the end as
on the whistle. It had holes and was played
with the fingers. They could not play a
tune, but made a harsh, shrill noise. At
dances an old Indian would beat a skin
stretched on a stick, and kept time very
correctly.

I never saw the Potawatomes
here. The latter were on the British
side in the war of 1812, and associated
with the Potawatomes. The Pota-
watomies at Wayne's battle called the
swords knives komon, and the men
big knives Chi-mo-komon.

The Wyandot language was harder
than the Mohawk and I never got it as
well. The Ottawa differed some from
the Wyandot. If the Ottawas wished to
express indignation they would call the
object of it Tues-cos-new (you are not
good.) The Potawatomie Indians who
sided with the British were utterly de-
tested and pointed at as not being good.

In 1817, I think, or perhaps 1818, two
men, Wood and Bishop, of Sandusky,
and the Peninsula, went up the Portage

River (then called the Carmine) trapping
coon. They had guns, ponies and con-
siderable fur and other property. There
Indians, part Potawatomes and part
Ottawas came to their camp. The two
elder killed the whites. A friendly In-
dian found the bodies and revealed the
crime, giving a clue to the murderers.

A Captain Burt, of Milan, raised a
squad of seventeen or eighteen men in
Huron county, then just organized. Burt
demanded the murderers, threatening
that if they were not given up the Gov-
ernment would exterminate the tribe.
The rogues were surrendered, taken to
Norwalk and confined, handcuffed and
chained to the floor in a hatter's shop.

Sometime after, they were let out for
a few moments. They slipped their
hands out of the cuffs (an Indian's hand
is like a woman's,) caught up their
chains and ran. The jailer shot one in
the shoulder, but all got away.

We then lived five miles south of Nor-
walk. All that could carry guns turned
out and searched the woods around Mon-
roeville, between Norwalk and the river.
At night we formed a line just so we
could perceive if any one passed, but we
could not find them.

Two got back to the nation. The old
one shot was found two or three weeks
after by a man hunting cattle between
Milan and Monroeville. He had lived
on roots. His wound was very bad and
and there were worms in it, which was
killed with spirits of turpentine. The
other two had already been returned by
the Nation, camped on the Maumee.

All were tried together at Norwalk.
The youngest (about seventeen) turned
State's evidence. He said he was with
them but took no part in the murder,
but they compelled him to break the legs
of the victim with a hatchet afterwards,
so he would not inform.

He was a fine looking boy. He was
acquitted. He sat on the floor and when
so informed by an interpreter he sprang
to his feet and gave a terrible yell of re-
joicing. The other two were found
guilty and sentenced to be hung.

Before they were hung there were so
many more Indians than whites, there was
much excitement, it being reported that
a rescue was to be attempted.

Burt gathered his company. Four, of
whom I was one, were placed at the door
to keep away the crowd. There were
many whites from Cleveland, Mansfield,
Sandusky and about the bay, men, wom-
en and children.

The Indians outside made motions to
shoot or bayonet the criminals, also mak-

ing mutters and shaking their heads at hanging. It is terribly against their nature to be hung like a dog.

The captives were placed in a wagon and we opposite the wheels. When we got half way they gave a very savage yell, which made very great excitement, being supposed to be the signal for rescue, but no one came near.

It has been reported that they were given liquor. It is a mistake I have desired to correct. The Sheriff (first in the county named Farwell, and I think Lyman), told them that if they went out quietly and walked up to the gallows he would give them something to drink; he did not say what.

When they were seated they were handed a black junk bottle filled with

water. One of them put it to his mouth, but at once pushed it away and shook his head.

He wanted rum and was angry. When the circle was formed I was inside and within ten feet of the drop. The gallows had a trap door with a key which the Sheriff knocked away with an adze. They fell so that their feet were about two feet below the scaffold and not near the ground. One had his neck broken, I think. I saw no sign of life. The other did not break his neck and struggled for some time, drawing up his shoulders and writhing as it in awful distress. I cannot tell how long, but am sure as long as a man can live without breath. They were hung between 1 and 2 p. m. and after it was over the Indians got to drinking and fighting among themselves.

WYANDOT MISSIONS in 1806-7--DIARY of QUINTUS F. ATKINS.

PREPARED BY C. C. BALDWIN.

In the Library of the Historical Society is a diary of the "Daily employment of Quintus F. Atkins, while on a mission with the Rev. Mr. Joseph Badger to the Wyandot Indians, inhabiting the Sandusky River." It extends from April 1st, 1806, to August 14th, 1807, and is a very interesting picture of daily life on the Sandusky River at an early day.

Quintus Flaminius Atkins was born May 10th, 1782, in Wolcot, New Haven county, Connecticut, son of Josiah, Sr.

In 1798-9, war with France seemed imminent, and the United States raised an army in which young Atkins enlisted and was stationed at New Haven. The war cloud passing away, he commenced moving West—first, to the "Genesee country," and in October, 1802, to "New Connecticut," settling in Morgan, Ashtabula county. In 1805 he carried the mail on the Cleveland and Detroit route. This was done on foot, carrying the mail on his back. The labor was not easy,

but his journal shows that constant hard work was to him no drudgery. On the 22d of February, 1804, he married Miss Sarah Wright, daughter of Captain John Wright, of Morgan.

In the spring of 1806, Mr. and Mrs. Atkins were engaged as assistants to Rev. Joseph Badger, missionary to the Northwestern Indians, and their daily life appears in the journal. Judge Atkins lived to an honorable old age, happy in his descendants. Driven from his station by fever and ague he returned to Morgan. He was Lieutenant in the war of 1812. In 1816, Sheriff of Ashtabula county. In 1820, County Auditor, then a new office. In 1824, Superintendent of the "Maumee Road," then to be built by the State from the avails of land granted by Congress for that purpose. The road was completed in 1826. In 1835-6 he was agent of the Arcole Furnace Company, of Madison, Lake county, Ohio.

In 1839, Mr. Atkins removed to the farm in Brooklyn, in Cuyahoga county, Ohio, of his son-in-law, the late Hon. Edward Wade, of Cleveland. While

here, he became Associate Judge of Cuyahoga county, holding the office until by change of the Ohio Constitution the office was abolished. He died at the residence of his son-in-law, Fredrick Judson, Esq., East Cleveland, on the 23d of January, 1859. He was an active and useful member of the Presbyterian Church—an early anti-slavery leader; active and successful in addressing meetings, personal arguments, and with his pen. In his later days he wrote much valuable historical matter containing pioneer life in Northeastern Ohio, sketches of road making in Central New York, volunteer service about Huron River and Sandusky Bay in 1812, and many others. He had twelve children, ten of whom lived to maturity. One son, Captain A. R. H. Atkins, in 1876 was in Chicago. The rest were daughters, one of whom, Sarah (after the wife of Hon Edward Wade) was born among the Indians on the Sankusky.

His children and grandchildren make a very numerous clan, engaged in nearly all professions and active business with success and vigor. One cannot but think in examining the list that they have all received a rich inheritance of the very vigorous, bodily and mental strength which he himself possessed.

But to the diary.

From April 1st,* 1806, to the 29th of the same month Mr. Atkins labored with Mr. Badger building a boat and making preparations. On the 29th they took the boat as far as Mr. Ambrose Humphrey's mill where they unloaded and took the boat around the dam. They reached the dam May 2d, on the 3d they put out and with a "fair wind and kind Providence" they sailed thirty-six miles to the Cuyahoga. After several detentions by head winds and storms, on the 14th they rowed up the Sandusky River to Mrs. Whittaker's where they unloaded and had family prayers, having with them an Indian convert named Barnett. This was three miles below the rapids. On the 17th, on returning from very successful fishing at the rapids, he heard Crane,† a Wyandot Chief, make a speech expressing his pleasure in granting permission to work their land to get food, and hoping they would dwell together in peace. Mr. Atkins had already got timber for a plow.

* NOTE.—It appears from the diary of Mr. Badger, also in the Society Rooms, that the Missionary Society was to pay Mr. Atkins \$12 per month and Mrs. Atkins \$1 per week.

† Tarhe or Crane, a Wyandot Chief who gave name to Cranestown in Wyandot county, near Little Saakusky.

On the 19th Cephas Case and Henry — caught and salted a barrel of fish at the rapids.

The missionary work after this seems to have been splitting and laying up rails on the land allotted them by the Indians, plowing for the Indians and occasionally talking when he could (he not understanding the Indian tongue). He felt that he would give all that he was worth to be able to talk with Barnett in his own language. The plowing in the Indian cornfields covered many days. The close of the month they made a tent of bark, on the 28th they split one hundred and four rails in the forenoon, and in the afternoon finished the tent. Thursday, the 29th, they drew logs for a house for a Wyandot named Boldson. The 30th they finished the log business and in the afternoon plowed in the Indian cornfield for a white woman, taken when a child, and in habits and dress no way different from the Indians. Saturday, the 31st, plowed in the Indian cornfield in the morning and in the afternoon made a bedstead, dug a spring, etc.

Sunday, attended a meeting at Barnett's house, in the Wyandot village, situated on the Sandusky River at the foot of the rapids. Monday, June 2d, plowed for Big Arms, a Wyandot, on the island at the foot of the rapids. Tuesday, June 3d, plowed for the Wasp and Polly, both of them belonging to the Wyandot tribe. Wednesday, June 4th, plowed for Snow, a Wyandot, and David, one of the Mohawk tribe. The plowing continued, although by the 7th they commenced plowing occasionally on the society's land; the Indians, men, women and children, joined in planting their own land, and on the 13th a number on the missionary ground as well, though on Saturday, the 14th, the Indians spent the principal part of the day in dancing to their God. In the evening while we were attending family worship "they began to dance and whoop," which made Mr. Atkins make the reflection how blessed were we that we could worship God in the ordinances of his own appointment.

Sunday they had a small meeting at Barnett's.

Mr. Badger had an interpreter and the Indians danced to their own God. The next Sunday also Mr. Badger preached, while the Indians danced to their God in the forenoon. Saturday, July 12, helped Boldson finish sawing his shingle timber, (the shingles were split.) In the afternoon went with Mrs. Atkins over to the village to see the Indians perform a dance

appointed for the purpose of restoring Long Legs to health, who lay dangerously sick of nervous fever. At first Longhouse, the prophet, rose, took a bunch of herbs that to appearance had been bruised and dried, and cast it upon the fire. He stood in a fixed position until the smoke had nearly all ascended, he then sat on the ground, smoked his pipe, sat still, then arose and made a short speech, which Mr. Atkins supposed to tell what the Great Spirit had told them to do. At its close he cast his eyes upward, then pointed to an Indian who then sat on a blanket spread in the center of the house for the musician. The Indian then took a tortoise shell which appeared to have shot in it, and began to sing a melancholy air keeping time with the shell. In about ten minutes he suddenly raised his voice and began a tune less solemn, beating more vehemently with the shell, upon which the Indians began to dance at first but few, supposed by Mr. Atkins to be the relatives of the sick man, but before conclusion all were engaged, even those so old as to be obliged to walk round the circle, for the Indians always dance in a circle. After seeing them carry on in their savage manner until he was satisfied Mr. Atkins returned home, amazed that they should think dancing and hallooing would cure the sick.

Sunday Mr. Atkins was over. "Long Legs" was very sick, but the "Longhouses" were shut up conjuring over a person said to be dead, but likely fainted on account of poison given him by some wicked person Sunday, 27th of July. A messenger came to the village from the Governor at Detroit. The Indians spent the forenoon in dancing, and about noon were ready. The speech imparted the regard the Governor and President held for them and the wish that they might attend to agriculture and forsake their heathen practices. Mr. Badger had been to Detroit, and followed in a discourse showing them the folly of so much time in dancing and the iniquity of their manner of worship. Having finished what he was directed to say by the Governor, he left the long house and preached at Barnett's. Sunday, August 3, there was a sick man at Mr. Whittaker's who had charge of the goods for a store for government to be kept at Sandusky. The next day Mr. Atkins agreed with Mr. Badger to go home to New Connecticut, if he had no more ague, with which he had been much troubled. August 10, he escaped the ague and next day started for Morgan, Ashtabula county, with Robert Giles, a black man whom they found

at Cleveland when they first went up. They encamped two miles west of the Huron River. The next morning at 8, reached Flemings, who appears elsewhere to be a French trader stationed upon that river. They found the Vermillion fordable, water being about to the middle of the horse. At the Black River they found three canoes of Ottawa Indians who set them across in a canoe. The night of Wednesday, the 13th, he stopped at Major Spafford's in Cleveland. The next day he reached Grand River, and stayed with General Payne, with whom he bargained for a barrel of pork, free from heads or legs, for \$25. The next day he reached Hull Smith's store in Austinburg, where he laid in a supply of rum, Jesuit's bark, and rhu-barb (for the ague). The next day he reached home after an absence of four years and found his parents well.

Wednesday, the 20th, he attended election of military officers at the house of Daniel Sterling. Stephen Brown was Captain, John Henderson Lieutenant, Truman Beach Ensign. September 16th, he logged three days for Mr. Josiah B. B—, who paid him in homemade cloth for a pair of trowsers. He soon returned to the mission and records, November 17, the arrival of Mr. Badger, and his son Lucius, with a pair of oxen for missionary use. On the 25th Mr. Badger started for the Upper Town. December 1, he caught an opossum. December 2, he discovered William Lane and Mr. Badger with two other men from Chilli-cothe, coming with stock given by people of that and adjacent towns for the support of the mission. There were fifteen head of horned cattle and twenty-one hogs—a liberal contribution for the support of a preached gospel among the Wyandots that made our friend wish he might be more faithful in his station, in which it is evident from the diary he was already very industrious and faithful.

January 25, 1807, they caught a wolf in a trap they had made, and February 19, he built one S. W. of the house in which he soon records another. February 10, he assisted Mr. Waterman in copying a bill of articles for the factory, buying some powder of Mr. Whittaker. Mr. Waterman† being the United States Factor and the Factory seems to have been in the vicinity of Mr. Whittaker's. March 9, he enclosed to Mr. Badger a copy of Mr. Patterson's complaint to the

† Samuel Waterman, who Mr. Badger notes, was sent on by the United States with a store of goods under his management. Mr. Samuel Tupper was soon appointed in his place.

Governor against Mr. Badger and the Governor's letter to Mr. Badger on the subject of the difficulties at Sandusky. March 20, he set out for Morgan again; at Green Creek he was overtaken by the mail and Mr. Abbot from Detroit. They found the Huron fordable at the Rapids, and rode down on the east side of Mr. Burrell's. The next day they crossed the Black water (Black River) and the 22d, Sunday rode to the Cuyahoga and crossed it in a flat. On arriving in Ashtabula county, Mr. Badger and himself seem to have built a boat again as upon the first journey. Thursday, April 15, he heard the bad news of the death of Sylvester Wilcox, killed in an instant by the fall of a tree. Saturday, the 18th, Mr. Badger preached the funeral sermon from the text "Be still and know that I am God." In the latter part of May he was back, spending his time about equally plowing for the Indians and working at the school house. Sunday, the 31st, Mr. Badger preached in the Council house the funer-

al sermon of Throw-the-sand, a Wyandot. June 6, he rode down to Mr. Whitaker's, bought two buckskins for \$2. June 21, a Shawnee chief and two warriors, his attendants, took dinner with him, and in the afternoon Mr. Badger preached at the school house. July 22, he hewed plank for benches in the school house, and the next day did something at hewing down the inside of the building, a work that took him sometime. July 30, he got in a log for chinking the school house, and in the afternoon pulled flax for a while. Monday August 3, he adzed off the floor and the next day finished the door. The shingles were split. The journal ends 14th of August, 1807, with a dose of jalap and calomel which was one only of many doses recorded in this volume.

Even Mr. Atkins's stout frame was severely tried by the hard labors and constant exposure of this missionary field, and Mr. Badger records that he was very feeble.

WESTERN RESERVE

AND

Northern Ohio Historical Society.

No. 51. December, 1879.

GEN. WADSWORTH'S DIVISION, WAR OF 1812.

BY COLONEL CHARLES WHITTLESEY.

Of the part taken by the men and officers of this division in the defense of this frontier very little will be found in history.

In territory it embraced the counties of Jefferson, Columbiana, and Trumbull, according to their limits in 1803. The first act of the regular session of the Legislature of Ohio, relates to the organization of the militia. There were seventeen counties in the State, in which four divisions were organized; the Major Generals appointed by the Legislature. General Elijah Wadsworth of Canfield, now in Mahoning county, was placed in command of the Fourth Division. In 1812 the First Brigade of this Division (General J. Miller), embraced all of Jefferson county; the Second Brigade (General Reasin Beall), embraced the original county of Columbiana; the Third Brigade (General Simon Perkins), Trumbull and Ashtabula; the Fourth Brigade (General Joel Paine), Portage, Geauga, Cuyahoga, and their dependencies to the west.

During the war, the *Trump of Fame*, a newspaper published at Warren, Ohio, edited by the late Hon. T. D. Webb, was the only paper on the Reserve. Looking over its files in the library of this society, very few letters, editorials or reports relating to local military operations are to be found. There seems to have been extreme reticence on the part of commanders in the field, or the limited size of the paper did not allow much correspondence to appear in print. From the Adjutant General's office at Columbus, the records of that date are missing. At the War Department, of what pertained to the

Volunteer Service, very little escaped the conflagration of the public buildings in the year 1814. The actors are nearly all dead.

One of the first duties of this society was the collection of such letters, records and orders relating to the war, as had not been lost during the lapse of sixty years.

Of those relating to the First Brigade (General Miller) we have scarce any, and very few pertaining to the Second Brigade (General Beall). For the Third Brigade (General Perkins) we have been more fortunate; but the company muster rolls, and orders are quite deficient. Many of the papers of General Wadsworth were preserved by his son, the late Frederick Wadsworth, or by his aid, the late Elisha Whittlesey. Most of the war letters of General Perkins have been saved. The late John Harmon of Ravenna, a volunteer of the first company raised within the division, has given to the public his recollections of those times. We have also the record and some of the papers of the Second Regiment, Fourth Brigade, donated by Mrs. H. M. Chittenden, a daughter of Mr. Harmon. From the Commander of the Fourth, (Gen. Paine,) we have nothing. The late Judge Peter Hitchcock was Lieutenant-Colonel of the First Regiment, whose papers have been placed in our possession by the family and those of Lieutenant-Colonel Rayen by his daughter, Mrs. Parmalee. Judge George Tod, who received the appointment of Major in the Nineteenth Regiment, regular Infantry, left a large collection of letters, written while he was in the service, which the heirs of

the late Governor Tod have deposited with us.

But with all these sources of information, the stirring events of those times reach us only in fragments. Many valuable documents have from time to time been published in our series of tracts; of which more will follow, as fast as our means will permit.

I have concluded to wait no longer for more complete records, which may never be secured. We have traditionary evidence of the alacrity with which the inhabitants of Northeastern Ohio rushed to Cleveland, the most important, and most exposed point on the frontier; after the Northwestern Army was sacrificed by Hull. The news reached General Wadsworth at Canfield, on the 22d of August, who, without authority from Governor Meigs or the General Government, issued an order on the same day, for the entire division to rendezvous at this place. In the *Trump of Fame*, September 2, 1812, it is recorded that "As soon as the news of the fall of Detroit was confirmed, every man ran to arms; old and young without distinction of politics repaired to the post of danger. None waited for the formality of orders, but every one, whether exempt from military duty or not, put on his armor." Boats were seen at Cleveland coming around Avon point, which were presumed to carry either British or Indian enemies.

Most of the women and children fled to the interior settlements, spreading the appalling news as they went, which was taken up by couriers, riding day and night, calling for help. These messengers on the following day, which was Sunday, found many congregations collected for religious worship, in barns and log cabins, or in the shade of the native trees. These meetings were at once dispersed. Those who were able to bear arms prepared to march, and those who were not, gave them God speed. In many cases, before the General's orders were known, the citizens had collected in squads or companies, sharpened their knives, filled their pouches with bullets, shouldered their rifles, and started for Cleveland. The alarm proved to be a false one, as the boats contained only the dejected victims of the surrender, on their way home on parole. Instead of an enemy, the self-organized militia met them as friends, who needed all their sympathy, and who were received with the largest hospitality. But the danger of an in-

vasion was none the less real, because of a false alarm. If General Brock had acted with the same audacity after the fall of Detroit, as he did before, he might have seized the entire American shore of the Lake.

The orders of General Wadsworth were received in the Third and Fourth Brigades, like the calls of the Scottish Chiefs, through the Highlands. On the 23d he was at Ravenna directing the concentration of the Fourth Brigade. On the 26th his headquarters were at Cleveland. In our duplicate of his report to the Secretary of War, of that date, there is a blank where the number of his command is stated. Some were mounted, but more were on foot. All carried something in the nature of a military weapon. Only a part of the officers were in uniform. They had no tents, little ammunition, no supplies, no funds, few blankets, and scanty clothing. The militia act of 1803 was a very efficient one, enacted by men who had participated in Indian wars. It remained as it was first passed, with some slight amendments in 1809, by which it lost nothing in efficiency. Under it the Executive of the State and the Generals had war powers. Although after the peace of Greenville in 1795, the Indians had ceased to commit murders, every frontier man well knew that their vengeance against white men had not abated. The red man is always ready for war. He needs no commissary or pay department. On the fringe of the settlements, he mingled with the frontier men, in the depths of the same forest. It was well known that he received ammunition from the English agents at Malden, who led him to expect a war against the Americans, his hereditary enemies. Our militia were well convinced of all these dangers, which had the effect to give them the character of a standing army without its expense. None but courageous men would have located themselves within reach of such a foe. Left alone, they felt themselves equal to their own defense; but to this was superadded the intrigues, resources and power of the British nation.

Under the law of Ohio the Governor and the State military officers were made nearly absolute, as they must be in order to be effective. They could order a draft, seize supplies and impress transportation.

The moment had now arrived when these powers became available. Congress and the Administration, by a wise foresight, provided, in the winter of 1811-12, for the defense of this frontier,

by means of an invasion of Canada. Unfortunately for military purposes, that part of the English dominions projects into the United States like a wedge, of which the point is at Malden. Governor Hull of Michigan, two months before the declaration of war, was appointed a brigadier to command an expedition to seize this position as soon as a state of war occurred, and with it Western Canada. With abundant means at his disposal, he was in its vicinity on the Maumee River, when he received news of the declaration of war. With a command of about two thousand men, of which Southern Ohio had furnished more than half, he passed in sight of Malden without attacking it. At that time it was scarcely to be called a fortification, and was garrisoned by less than 100 regulars. There were in the vicinity, in addition to these, about 300 irregular troops, Indians and local militia, and an armed schooner. Within a month our entire army was sacrificed through the pusillanimity of its commander; and thus the State of Ohio was left wholly defenseless, so far as the plans of the General Government were concerned. There was at the front no second army to support the first. The only obstacle in the way of the British General, lay in the militia in the vicinity of the lake.

Hitherto the Ohio regiments were only half strength, consisting of eight and ten skeleton companies of fifty men, commanded by a Lieutenant Colonel and two Majors. It was not until the session of 1812-13 that full regiments were authorized, though Lieutenant Colonels commanding were always spoken of by courtesy as Colonels.

Before the close of the month of August, General Wadsworth and General Perkins had reduced the heterogeneous materials around them into the semblance of military order. Men were abundant and full of ardor, but the accessories were wholly wanting. Companies that had no officers, elected them, consisting of a captain, a lieutenant and an ensign. Lieutenant Colonel Richard Hayes of the Third Regiment, Third Brigade, from Trumbull county, crossed the Cuyahoga River first and headed for the Huron River by the land route. To General Perkins was assigned the command of all troops at the front, with a large discretion. On the 6th of September we find them at the mouth of Huron, with about 400 men. They were in a position to defend that line before the date of the first order, relating to that object, was issued at Washington, and

probably before the news of the surrender reached there.

These were not, however, the first movements of the war on this coast. In addition to three half regiments of volunteers under Colonels Finlay, Cass, and McArthur, raised for Hull's command, a draft was made in April of one company to each brigade to serve one year, intended to swell the numbers of his army. Upon the declaration of war, June 18, 1812, this draft was called to the field. In the Fourth Brigade the requisite number volunteered, and on the 23d of May, at Ravenna, elected Colonel John Campbell captain. Of the company formed from the Third Brigade, we have only the information that on the 12th of June Captain J. W. Seely was placed in command, numbering six officers and thirty-eight men.

Campbell was ordered to march for Lower Sandusky on the 1st of July, where stores were being collected for Hull. It moved on the 6th, reached Cleveland on the 10th, where it embarked in two large batteaux with decks, and arrived at Sandusky (now Fremont) on the 14th. Captain Campbell and Captain Norton, with a company from Delaware county, fell to work to erect a stockade. There had been an Indian agency here and public stores for several years.

On the 21st Captain Campbell and Captain Rowland, commanding a company from General Beall's brigade, were ordered to join General Hull at Detroit. They embarked in their batteaux, leaving their sick on the 4th of August, reaching French Town on the River Raisin (now Monroe, Michigan,) on the 10th. On the 17th they were startled by the arrival of Captain Elliott of Brock's army, who brought an order to surrender. Captain Brush with a cavalry company from Chillicothe, had just arrived marching along Hull's trail, as an escort to a drove of cattle. The officers refused to acknowledge the authority of Elliott, and placed him in arrest. During the following night the cattle were driven southward by a large part of our men, who escaped to the settlements. Only twenty-six remained, most of them unable to march, whom Captain Elliott escorted to Malden, as prisoners of war. Mr. John Harmon, late of Ravenna, was one of this unfortunate band.

The fort at Sandusky had been abandoned. General Perkins at once ordered a scout in that direction, which returned on the 8th of September, and reported Indians in that vicinity who had burned the

public buildings and Block House. The latter part of this report appears to have been an exaggeration.

General Reasin Beall commanding the levies from the first and second Brigades, supposed to be 600 in number, composing the left wing, was directed to form a camp at Wooster, in Wayne county. From there he should move for Mansfield, thirty miles further west, by the 9th of September, constructing block houses at proper points, and place himself in communication with General Perkins.

General Wadsworth on the 10th, receiving at Cleveland the report of the spies at Lower Sandusky, agreed with General Perkins that the force on the Huron was insufficient. Major Kreutzer with eighty men, the advance of General Beall, was then at Mansfield, having built a block-house at the crossing of the Black Fork of Mohican, eight miles to the east. There were men enough at Cleveland, although some had been disbanded, but everything else was wanting. A large part of those at Huron were sick. They were also deficient in flints, lead, powder, muskets, artillery, clothing, rations, and medicines, and their short term of service fast expiring. On the 15th Wadsworth got two companies of Colonel Rayen's regiment under way for Huron. At the same time he directed General Perkins to leave his command with Colonel Hayes, and re-appear to Cleveland for consultation. A camp had been formed at Old Portage, a few miles north of Akron, on the Cuyahoga, where General Wadsworth established his headquarters on the 23d. An interior route to Huron and Sandusky was being opened, from thence through the wilderness. New drafts for six months' service had been ordered, which began to arrive in the latter part of September, as many of them mounted as could supply themselves with horses. Colonel Hayes retired from Pipe Creek, on Sandusky Bay, to Camp Avery, on the east bank of the Huron, near where Milan is now situated.

It is not practicable to fix the precise order of events during the month of September, 1812. Evidences of the presence of hostile Indians accumulated every day. Prior to the 15th two boats and a small detachment under Major Austin and Lieutenant Allen went from Huron to the Peninsula and Cunningham's (now Kelley's) Island. On the island a British schooner was found aground, which Lieutenant Allen stripped and burnt. On the way home Michael Guy, of Warren, was found dead

and scalped, on the peninsula, and a soldier of the command was shot. Four whites were killed and scalped near the crossing of Black Fork, on Major Kreutzer's route.

On his arrival at Huron, General Perkins commenced building a temporary defense near the shore of the Lake, east of the Huron River. General Wadsworth preferred a position on the east bank about ten miles up the River, at the head of bateaux navigation.

The first camp of Colonel Hayes was about three miles lower, at a bluff on the same side. Captain Clark Parker at once commenced a block-house at Camp Avery.

Before General Wadsworth received orders from Washington, about the 20th of September, he had, in connection with General Perkins, planned and executed judicious measures for the defense of the south shore of Lake Erie. Hitherto the Government had furnished neither instructions, materials, men or money for this part of the frontier. General Winchester, who was then in command of the Northwestern Army, was engaged in collecting troops from Kentucky and Southern Ohio, to repair the disaster of Hull. He advanced up the valley of the Great Miami, following the route of Harmar in 1790, to establish himself at Fort Wayne, Indiana. On the 26th of September he was at Piqua, in Miami county. The Seventeenth and Nineteenth Regulars were being recruited in every village of the Ohio Valley. They joined Winchester by companies at Cincinnati, Dayton, Urbana, and along his route. Cleveland, Mansfield, Urbana and Dayton were then on the line of frontier towns, with few and scattered settlements beyond them on the northwest. Lower Sandusky (now Fremont) was the military point on which the right of this extended line was to be made secure; but hitherto it had not been occupied by a sufficient force. A more salient point was fixed for the center of the offensive line at Maumee Rapids (now Perrysburg), but it had not been practicable, over such an execrable road, to reach it directly along Hull's trail, with troops and supplies. The extreme left was at the forks of the Maumee (now Fort Wayne, Ind.), far out in the Indian country, and like the right at Huron, was thrown back. Both had water communication with the mouth of that river by boats. No American vessels sailed on the lake. On all the land routes to the military front there was a morass to be crossed seldom less than thirty miles wide,

known as the "Black Swamp." It embraces the low lands at the heads of the Auglaize, and the country drained by the Portage or "Carrying River," a sluggish pool extending along the lowest part of the swamp only a few feet above lake level.

It was of the highest consequence to reoccupy Lower Sandusky, or to save what stores were left at that place. Major Frazier and two companies were ordered there in four boats on the 25th of the month. During the next day these boats left the Sandusky River for Huron loaded with supplies, Major Frazier and a part of the men remaining. Colonel Hayes was then sick and Major Sherman virtually had command. The boats were detained at the entrance of the bay by a storm. Sheltering themselves behind Bull's (now Johnson's) Island, a party went ashore and following a trail or road across the Peninsula came to Captain Ramsdale's place, on the lake shore near the "Two Harbors." They found forty-seven Indians in possession of the premises, rioting upon fresh beef, honey, and other luxuries. With the caution of backwoodsmen they eluded the observation of their red enemies, gained their boats, and landing at Cedar Point, dispatched an overland express to headquarters. As the troops were changing continually, and the records of the post are not yet procured, it cannot be stated what companies were there at this time. A letter of the 11th of September, puts the number of effective at only 250, including Captain Burnham's company from Ashtabula, Captain Clark Parker's of Geauga, Captain Harry Murray's of Cuyahoga, with Captain Dulls, (or Dolls), and Captain Cotton's, of Trumbull.

A poisonous malaria, generated by luxuriant vegetation, everywhere filled the valleys of the rivers. It is not yet determined what constitutes malaria, but its effects upon the early settlers were distressing, taking the form of intermittent fevers. The Valleys of the Huron, and the Cuyahoga, where the troops were collected, were notorious for ague and fever, and the month of September was the worst period of the year. A large part of the men were accustomed to vegetable food, comfortable lodging, regular hours, and sufficient clothing. Their new mode of life, with irregular sleep, exposures to sun by day and fogs by night, salt and insufficient rations, greatly increased the probability of sickness. Mr. Giddings says: "The bilious fever had reduced our effect-

ive troops until we were able to muster only two guards, consisting of two relieves, so that each healthy man was compelled to stand post one-fourth the time."

The Rev. Joseph Badger filled the places of chaplain, postmaster and nurse. Dr. Thompson of Hudson held the position of surgeon, with a scant supply of medicines, no sanitary assistants, and scarcely any hospital accommodations. For delicacies to soothe their collapsed and nauseated stomachs "Parson Badger" made a mortar in the top of a stump, where he pounded corn and made samp, or "hasty pudding." This he called "priestcraft." He was far more popular than the surgeon, with his prescriptions of calomel and jalap.

Their miserable plight did not extinguish the inherent fondness of the Yankee for practical jokes, or their readiness to act, when the hour for action arrived. A member of Captain Rial McArthur's company of the Odd Battalion, Fourth Brigade, managed to mix his prescription with the Doctor's pudding. A man having captured a pumpkin, concluded to make its possession sure by seating himself upon it. By some mysterious process a cartridge was inserted in the cavity of the pumpkin, and exploded under him. Their jokes were soon interrupted by warlike activities. On the evening of the 28th there was a decided commotion in the camp. Drums and fifes were beating for volunteers to attack the Indian depredators at Ramsdale's farm. A letter from Colonel J. S. Edwards had been received by Colonel Hayes, requesting him to secure for the army four hundred bushels of wheat in a field near the Ramsdale house. Sixty-four men responded to the call, who started for the Peninsula the same evening about dark, commanded by Captain Joshua A. Cotton, Lieutenant Ramsey and Lieutenant Bartholomew. At 4 o'clock the next morning, after a march of twenty miles, they reached Cedar Point, at the mouth of the bay. The boats of Major Frazier carried them to the Peninsula, opposite Bull's Island, where there was an orchard and a log house. Eight of the Frazier party joined in the expedition.

It is remarkable that the only engagement known to have been fought on the Western Reserve, was not fully described until after the lapse of half a century. We have found only one detailed account of it by a party who participated in the affair. It was written by the late Hon. Joshua R. Giddings of Ashtabula county, a volunteer from Captain Burnham's company. It was first published in the

Fire Lands Pioneer, Vol. 1, No. 4, for May, 1859, the details of which must be reserved for a future paper.

NOTES AND CORRESPONDENCE.

Statements of Major George Darrow, Commanding the Odd Battalion of the War of 1812, Portage County, Ohio, to Professor M. C. Read, Hudson, Ohio, January, 15, 1876:

"I will make a statement of what took place and what I was called upon to do in the years 1812, '13, and '14, for the aid of the War Department, which was the most active part of my life. In August, 1812, we were then a frontier settlement, and the people were much agitated on account of the British and Indians.

General Wadsworth called out the militia and ordered them to rendezvous at Cleveland. He himself and light-horse company came through Hudson and called on me to provide beef, flannel, &c., and get it on to Cleveland as quick as possible. I went directly upon the business, and bought and sent on my own responsibility. The troops did not continue at Cleveland but a short time and then marched to old Portage, where they wanted the same, which I furnished. They were not long there before the General thought best to march to Huron. He then wanted me to go and collect horses, oxen and wagons to make the march, as he thought I might persuade some to let them go without a press warrant. I did as directed, and was successful.

I was then called upon by the General to appraise such property as was wanted for the expedition—horses, oxen, wagons, saddles, bridles and blankets. I let my own horse go on express the same day.

Hull's army brought many calamities on us. Many of our soldiers returned sick, and many of them died. This brought sickness and death into many families. When the troops came from Kentucky they left their horses at Cleveland, and their horses were sent to Hudson.

I was again called on to provide for them pasture, hay, oats, &c.

Again, after Commodore Perry's victory, when the prisoners were brought to Cleveland I was called on to provide beef for them. Until 1813, I was in the militia, and served in the State, first as a quarter master, then as paymaster. I once made application for something for services, under the call of General Wadsworth, but did not obtain it, as I was not known as one belonging to the army."

This is followed by an account and statement signed by Major George Darrow, dated Hudson, Ohio, May 4, 1813, directed to General Wadsworth, showing the services rendered and supplies promised by citizens within his command. The amounts claimed is about \$1,600. It was many years before these claims were settled, so long that many of the parties had become weary of the contest with red tape, or had gone where the claimants were represented at Washington by their administrators.

[Draft in the Fourth Division, ordered April 27, 1812, returns not complete.]

First Brigade, Jefferson county—Captain, Nicholas Murray. Thirty-two men besides officers of the First Regiment. Lieutenant-Colonel, John Andrews. Discharged at Huron, December 12, 1812.

Second Brigade, Columbiana county—Captain, Thomas Rowland. Mounted volunteers. Total, 47. Escaped from the River Raisin, August 18, 1812. Discharged July 5, 1813.

Certificate attached to the muster roll of Captain Rowland's company:

"We do certify that having received intelligence by an officer from General Brock, commanding the English Army in Canada, that General Hull had surrendered the Northwestern Army of the United States, then under his command, we do not see proper to deliver ourselves up under such disgraceful circumstances, and from the River Raisin retreated to New Lisbon, Ohio, by the way of Urbana, and that the soldiers did furnish their own subsistence while traveling 360 miles of the distance, and are entitled to pay for the same.

THOMAS ROWLAND, Capt.

NATH. MCCracken, 1st Lieut.,

DAVID HOSTETTER, JR., 2d Lieut.,

CHARLES HOY, Ensign.

New Lisbon, Ohio, July 5, 1813."

Third Brigade, Trumbull county—Captain, J. W. Seely. Total, 44. Organized June 12, 1812. No further information.

Fourth Brigade, Geauga, Portage, Ash-tabula and Cuyahoga counties—Captain, John Cambell. Partly mounted. Total, 35. Surrendered in part at the River Raisin.

Captain Rial McArthur's Company of Independent Rifles, southwest part of Portage county—Organized as minute men. Mustered August 23, 1812; discharged at Camp Avery in the fall of 1812.

Returns of the Commissioned and Staff officers of the First Regiment, Fourth Brigade, Fourth Division Ohio Militia, in camp at Cleveland, August 30th, 1812:

Lieut. Col. Jedediah Beard.

Major Samuel Jones.

Major Eleazer Hickox.

Adjutant Eleazer Patchen.

Quartermaster Samuel W. Phelps.
 Paymaster Samuel S. Baldwin.
 Clerk Peter Hitchcock.
 Surgeon William Kennedy.
 Surgeon's Mate, Erastus Goodwin.
 Sergeant Major Frederick E. Payne.
 Quartermaster Sergeant James Strong.
 Drum Major Stephen Bond.
 Fife Major David Hill.
 Capt. Venon Stone, Ashtabula county.
 Capt. Charles H. Payne, Geauga county.
 Capt. Clark Parker, Mentor.
 Capt. Norman Canfield.
 Capt. James Thompson.
 Capt. Wm. H. Hudson.
 Capt. Allen Gaylord, Cuyahoga.
 Capt. Harvey Murray, Cleveland.
 Capt. David Hendershot, Euclid.
 Lieut. Eli Fowler, Cuyahoga county.
 Lieut. Cal. J. Forbes.
 Lieut. Theron Graham.
 Lieut. — Humphrey.
 Lieut. Samuel Hardy.
 Lieut. Walter Strong.
 Lieut. Dyre Sherman.
 Lieut. Lewis Dille.
 Ensign Simon Moss.
 Ensign Hezekiah King.
 Ensign — Taylor.
 Ensign John Hopkins.
 Ensign Elijah Nobles.
 Ensign Elias Cozad.
 Ensign Caleb Baldwin.

I hereby certify the aforesaid officers have performed duty in actual service the number of days annexed to their names.

JEDEDIAH BEARD,
 Lieut. Col. 1st Regiment.

Cleveland, August 30, 1812.

[Governor Meigs to Captain Campbell.
 From the Harmon papers.]

ZANESVILLE, June 11, 1812.

Captain John Campbell:

SIR: — Having been informed that you command a company of volunteers in the service of the United States, and having this day received advice from the Secretary of War, you are directed to proceed as follows: You will march your company to the nearest point on Lake Erie, where you can procure batteaux or water craft sufficient to transport your company and provisions for twenty days—to Lower Sandusky. The provisions and ammunition you will purchase; you will take with you the necessary tools for building two block houses at Sandusky, and move as soon as possible. You will build two block houses and piquet them, so as to protect the United States trading house and stores at that place. You will treat all friendly Indians well, but be cautious against their insidiousness and deceit. Tell the Crane you came from me. You will conduct everything relating to expense with due regard to economy. I will pay all the expense on demand. I have sent you \$100. When the express returns, I will

send you a sum sufficient for all purposes to Sandusky. The water craft I wish you to hire. If not to be hired, you must purchase it. The object is to protect the United States Trading House, and keep open a communication with the foot of the rapids of the Miami.

I returned yesterday from the Army of Ohio, on the frontiers, opening a road to the foot of the rapids, at which place it will be in about twelve days. The army is about 2,000 strong, 400 of which are regular troops. I expect you will meet at Sandusky Major Butler from Delaware, with a company to assist you.

Write me by the express.

Your obedient servant.

R. J. MEIGS,
 Governor of Ohio.

You will have the arms and rifles, etc., appraised, so that in case of loss the United States will pay for them.

The time will not admit of my sending arms from the Arsenal in Kentucky. You must do the best you can.

R. J. M.

[Lieutenant Colonel John Miller (Seventeenth Regiment United States Infantry) to Major Tod.]

RENDEZVOUS,
 CHILLICOTHE, July 29, 1812. }

Major George Tod:

SIR: I have this moment received orders from General Winchester to organize immediately one company of regulars in this State to consist of one hundred men, including non-commissioned officers, and to hold them in readiness to march at a moment's notice. He has ordered that the troops from your district be immediately marched to this place, or at least as many as will complete the company with what are here. You will therefore order all the recruits within your district to repair to Zanesville without delay, and detach and march to this place one first lieutenant, one second lieutenant and forty privates, should you have that number; if not, you will march what you have. I wish you, if possible, to have your detachment at this place against the 10th or 12th of August. Every reliance is placed on your exertion on this important occasion.

General Winchester informs me that the object in calling the company out is to join a detachment from Kentucky to march immediately to Detroit. You will please forward by the detachment a muster roll to its strength. As neither of you have included New Lancaster in your recruiting district, you are at liberty to send a recruiting officer there as soon as you see proper.

I have not as yet received any answer from General Winchester to the several inquiries I made him, concerning reports, returns, &c., &c. As soon as I do, I will inform you of it.

I am, very respectfully,

Your obedient servant,

JOHN MILLER,
 Lieut. Col. U. S. Army.

[General Hull to Captain Campbell (Harrington papers).]

SANDWICH, UPPER CANADA,
July 15, 1812.

SIR: Immediately on the receipt of this letter you will march your company, with that of Captain Rowland's, to Detroit. When you arrive at the foot of the rapids you will relieve the officer commanding the block-house there, and his party, by placing one subaltern, two sergeants, two corporals and sixteen privates at that post, who will be supplied with provisions by the contractor's agent at the foot of the rapids, and must report to me from time to time. An equal proportion of this relief will be furnished from each of your companies according to their strength.

I am, sir, your obedient servant,

[Signed] W. HULL,

B. General Commanding.
CAPTAIN JOHN CAMPBELL.

ZANESVILLE, December 15, 1812.

SIR:—By Ensign Weston I have examined the papers in relation to the service of your Company. I apprehend there will be no difficulty in procuring their regular payments. The Government has determined that the volunteers shall be paid to the end of the year, for which they were engaged. I will this day write to the Paymaster General, stating to him the situation of your Company, and I presume the District Paymaster will receive orders to pay them—your privates will be allowed \$34, and your non-commissioned officers and musicians \$36 or \$37 for their clothing. Those of your men who escaped from the Rapids of the Miami, I consider at liberty to serve again, but those of them taken at the River Raisin, are subject to the disgraceful capitulation, which tarnished the honor of the American arms, and abandoned a gallant body of men to a treacherous enemy. With much esteem, I am sir,

Your obedient servant,

LEW CASS.

To Captain John Campbell, Ravenna, O.

[Captain Campbell's certificate from Governor R. J. Meigs.]

I do hereby certify that Captain John Campbell's company of volunteers, raised in virtue of the Acts of Congress authorizing the President to accept the services of any number of volunteers not exceeding fifty thousand, as such were duly organized and by me ordered into the service of the United States on the 18th day of June, 1812, and in compliance with such order did actually serve as one-year's volunteers, and as such, being in the service of the United States, were actually surrendered and made prisoners of war, and carried to Malden in August, 1812.

In consequence of which services as aforesaid, Captain John Campbell's company are fully entitled to the same pay, rations, clothing and other emoluments as other volunteers raised for one year, in virtue of the act as aforesaid.

In testimony whereof I have hereunto

subscribed my name at Chillicothe, this 7th day of December, 1813.

RETURN JONATHAN MEIGS,
Governor of Ohio.

Companies in service from the Second Brigade from the papers of Major E. Whittlesey, Brigade Inspector, and Lieutenant David Clendennin, Paymaster.

First Regiment, Lieut. Colonel John Hindman, commanding.

Captain George Stidger, Independent Riflemen, thirty-five men, besides officers, at Lower Sandusky, January 20, 1813.

Captain William Blackburn, thirty-three men, at Lower Sandusky, February 15, 1813.

Captain James Hezlop, fifty-two men, November 30, 1812, Maumee Rapids.

Capt. Daniel Harbaugh (mounted) 33 men, Aug. 25, 1812, to Feb. 13, 1813.

Capt. James Downing, total 86, from Aug. 28, 1812, at Maumee Rapids, Nov. 30, 1812.

Capt. John Ramsay, total 72, Aug. 24, 1812, at Maumee Rapids, Nov. 30, 1812.

Capt. Wm Faulke, total 75, Aug. 25, 1812: Maumee Rapids, Nov. 30, 1812.

Capt. Joseph Zimmerman, 48 men, Aug. 25, 1812; Maumee Rapids, Nov. 30, 1812.

Capt. Samuel Martin, 45 men, Aug. 24, 1812; Maumee Rapids, Nov. 30, 1812.

Capt. Jacob Gilbert, 54 men, Aug. 25, 1812; Maumee Rapids, Nov. 30, 1812.

Death of Alexander Mason, in the battle of the Peninsula, from a letter of Captain Harvey Murray, October 13, 1812 (Fireland's Pioneer, January, 1862, page 30):

"There were two skirmishes on the land. When Mason was shot down, he reached his gun to one who stood next him, saying it was well loaded and sure fire, and wished him to take good aim. He expired immediately, but covered with honor. He had shot one Indian dead and run his bayonet through the vitals of another when he was fired upon."

The letter is dated Camp Avery on Huron.

[General Perkins to General E. Wadsworth, Cleveland.]

CAMP AT HURON, September 12, 1812.

SIR: I wrote you yesterday by Colonel Austin & by him you will receive full information of my proceedings. I will, however, state to you some of the leading causes that have induced me to pursue the courses that I have from time to time adopted. You will no doubt recollect that when I came here my expectation was to have with me a full Regiment & those well provided. The draft from Jefferson County, and a detachment from Colonel Rayen's Regiment was to make in addition to these now with me, the Corps, & it was not until the receipt of your order of the 6th inst., which came to hand late on the 8th that I was informed of a different course of arrangement. You will no doubt be able to judge whether I can protect this part of the country, with a detachment of about 250 effective men, on the frontier of a powerful & numerous enemy

at least 45 to 50 miles in advance of any aid or succour. I have cautiously concealed from my men the number of the force with me, & they have been led to believe that there are 400 that being the No. of which it was said this detachment consisted when we crossed the Cuyahoga. The troops from the south I cannot procure any information from. I have written twice by men from that part of the country who engaged to hand my letter to the officers; I have also sent an express & from all this I have no return.

Returns of the companies have been ordered as by your directions, but I cannot by this mail perfect one to send on; it shall be attended to & forwarded as soon as possible. The Captains have been so much occupied & their accommodations and conveniences for that duty so imperfect, that I have not been able to procure a return from them all; a return from five companies gives their effective strength—314 with 30 sick. One company I have no return from.

I am, sir, very respectfully yours,
SIMON PERKINS,
Brigadier-Gen'l.

MILITARY LINES AND ROUTES.

1. General Wadsworth's camp at Old Portage direct to Camp Avery, through the woods northwesterly. Sixty-five miles.
2. Cleveland to Huron, by land or by water, about the same distance, or sixty miles.
3. Camp Avery, General Perkins's headquarters, to Lower Sandusky, afterwards Fort Stephenson, now Fremont; course nearly west. About thirty miles.
4. Camp Avery to Mansfield, Richland county, thirty miles west of Wooster, O., nearly south. Thirty miles.
5. Fort Stephenson to Fort Meigs, now Perrysburg, Ohio, northwest, nearly all in the Black Swamp. Thirty-five miles.
6. Fort Finlay on Hull's Trace, at the crossing of the Auglaize, (now Hancock county, Ohio,) to Fort Stephenson (Fremont,) by way of Seneca. Forty-five miles.

These forts were light stockades with block houses made of squared timber thick enough to resist musketry, generally two stories in height, with floors of timber and loop holes for infantry. In the midst of a forest it is quickly put up and easily made proof against external fires by a roof of logs covered with earth. If the troops have artillery, guns may be mounted within it having embrasures. If placed at the angles of a stockade they supply the place of bastions. Many of the forts of the Indian wars were only large and well built block houses.

LIST OF PERSONS KNOWN TO HAVE BEEN KILLED IN NORTHEASTERN OHIO DURING THE INDIAN TROUBLES.

1747, June 23—Five Frenchmen killed by the Wyandots at a trading post near the west end of Sandusky Bay, its position not yet recognized.

1763, May 16—The principal part of Ensign Paull's command, British service, at a fort on the north side of Sandusky Bay, near the west end.

1786—Kribbs, or Krips, at the Salt Spring, Trumbull county.

1797, September 29—George Clark, near the Pennsylvania line on Beaver River, by an Indian named "Nemahahe," or Great Wolf.

1800, August—Captain George and Spotted John, Indians shot at the Salt Spring, by John McMahon and Samuel Storer.

1803—In the fall—Menompsy, a Chipewa medicine man at Cleveland under the hill, by Big Son, a Seneca Indian.

1807—January—Daniel Diver, shot through both eyes at Deerfield, Portage county, by John Mohawk, an Indian. Not killed. Nickshaw or Nickshaw, killed in retaliation by white men from Hudson, Summit county, in camp west of Cuyahoga River.

1812—April—Michael Gibbs and — Buel, killed at Pipe Creek (near Sandusky city), by O'Mic and Semo, both Indians, and soon arrested. Semo killed himself. O'Mic was hung at Cleveland, June 26, 1812.

1812, September 15.—Matthew Guy and another soldier of Lt. Allen's Expedition, killed by Indians on the Peninsula.

September 29.—In the affair of Captain Cotton on a trail across the Peninsula, between Two Harbors and Bull's (now Johnson's) Island.

Killed—James S. Bills, Simon Blackman, Daniel Mingus, Abraham Simons, — Ramsdale, Alexander Mason—6.

Wounded—10.

John McMahon, who shot Captain George at the Salt Springs in 1800, was among the wounded, and going home on leave, was supposed to be killed by the Indians.

1812—Late in the fall, a man shot by Indians near E. W. Bull's, at Ogonz's Place, now Sandusky City; four men killed and scalped on the Black Fork of Mohican, Richland county.

1813—Early in the season, Mr. Seymour killed by Indians near one of the Block Houses on the Huron, and a young man named Pixy captured.

1813—June—Five persons, part of a family named Snow, killed near Cold Creek, and eight persons captured; Mr. Gear, his wife and two children, Mr. Stewart and two colored men, killed, scalped and their heads split open within sight of Fort Stephenson.

During the war, an Indian killed by a citizen near the southwest corner of Hudson; also two Indians on the road east of Painesville, by citizens of the vicinity.

WESTERN RESERVE

AND

Northern Ohio Historical Society.

No. 52. May, 1890.

RELICS OF ABORIGINAL ART AND THEIR ETHNOLOGICAL VALUE.

Very little is necessary in the line of description for the effigies here presented, beyond the engravings and the letters of gentlemen who furnished us the photographs. We give them as a fair sample of a numerous class of relics in the West.

A few remarks upon their ethnological value will be sufficient to dispose of the subject of Indian stone effigies.

Among the relics of aboriginal art, executed in stone, there are in Ohio very numerous effigies of the human head and face. Some, like figure No. 2, are reputed to have been found beneath the surface at depths, which, if the reports are to be relied upon indicate very great antiquity, much greater than our artificial earth mounds. The number reputed to have been exhumed from the drift clay, sand or gravel beneath the surface are very few, and they are lacking in that unquestionable proof of position which is necessary in such cases. Compared with the antiquity of the drift deposits in Ohio, the most extreme era claimed for the Mound Builders is a very small fraction of time. The grotesque image from Marlboro, Stark county, Ohio, No. 2, if it was in place at the bottom of a well 12 feet deep, would rank with the flint implements found by Boucher de Perthes in the diluvium of the Valley of the Somme in France. Man may have existed in Ohio with the mastodon, elephant, rhinoceros, musk ox, horse, beaver and tapir of the drift period, as he did in Europe, but to decide such a question the proof should be undisputable. Effigies of animals carved on stone are more frequent than those of man. They are generally intended as an ornament for pipes, and are better executed than the human effigies. In sculpturing himself, neither the Indian nor the mound-builder has shown much artistic skill. The four specimens which we here produce are so crude and even grotesque that no inference could

be drawn from them in reference to the facial expression of the race. For animals, the expression is often life-like and spirited.

For those found upon the surface, their position affords no evidence for or against their antiquity. Those from mounds are probably not more than 3,000 years old. Those purporting to be from beneath the natural surface in undisturbed deposits would imply an age varying with each specimen to be determined by its surroundings. The one from Marlboro, is no doubt honestly described by the persons who were present, but their attention was not specially directed to its antiquity. It was first seen as a bucket of earth was emptied at the mouth of the well, and may have fallen in from the surface or very near it. Indians on the Northern lakes of the present generation have done as fine effigy carving as anything found in the ancient earth mounds. Some of their work, however, is very coarse. As a general rule the mound builders have produced better and more finished animal effigies than their successors the red Indian, but the difference in style is not so manifest that it is safe to separate their respective relics on this basis alone. Many of the surface finds are no doubt the work of the Mound Builders. In a collection of which nothing is known of their location or their position in the soil, it is not practicable to assort them according to the races by whom they were fabricated.

There is some reason to conclude that there were people on this territory prior to the builders of the Mounds. Our cave shelters have not been much explored, but as far as they have been examined the relics lying at the bottom of the accumulations indicate a very rude people. I anticipate that we shall find here as in other countries, that the most ancient race were the rudest, and were cave dwellers. I have seen at Portsmouth, Ohio,

on the banks of the Ohio River, fire hearths more ancient than the earthworks at that place. Whoever the people were who made these fires, they must have had arrow points, war clubs and stone axes or mauls. But we have at this time no evidence to connect such a primeval race with the human effigies scattered profusely throughout Ohio. These effigies present no uniformity of type, and, therefore, cannot represent race features. They approach nearer to the North American savage than any other people, but are so uncouth that they are of little or no ethnological value. There was no school of art among either the cave dwellers, the builders of the mounds, or the more recent Northern Indians, which was capable of a correct representation of the human face. These effigies must have been the result of the fancies of idle hours, produced under no system, and with no uniformity of purpose. They thus have no meaning which the historian or antiquarian can lay hold of to advance his knowledge of the prehistoric races. The ancient painters and sculptors of Central America have not left specimens of high art, but they are far above those of North America. There is in their human delineations no uniformity which gives them value as the representations of a living people. Native artists have no other standard than the persons by whom they are surrounded. The Italian heads of Christ present the Italian features, not the Jewish. On account of the uniformity of design in Central American statues and painting, we feel a consciousness that we see in them the prominent features of the ancient people, whose ruins remain to our times. We cannot say as much of the ruins of the Mississippi valley. The builders here have not left us, like the Assyrians and Egyptians, their portraits, nor any written or even pictorial record of themselves.

Cleveland, Ohio, May 15, 1880. C. W.

Figure No. 1, one-third of nature.



Nodule of iron ore, Plain, Stark county, O.

LETTER OF DR. PEASE.

MASSILON, April 5, 1880.

Colonel Charles Whittlesey.

Dear Sir:—While at a loan exhibition at Canton a few weeks since, I came across what I believe to be a specimen of aboriginal art, a photograph and drawing of which I send you inclosed, the former being about one-third and the latter exactly one-half the natural size. A young man seeing that I was interested in a collection of stone implements took me to another part of the room, and from an obscure corner of a case produced the specimen which I am about to describe. It is a nodule of kidney iron ore, weighing two pounds and fourteen ounces, 4 inches in height and $13\frac{1}{2}$ inches in circumference. There is a natural (apparently) opening through the base of the nodule which is $4\frac{1}{2}$ inches long. A human face is carved upon the nodule in relief $2\frac{3}{4}$ inches in length and $1\frac{1}{4}$ inches across the forehead. Radiating from the forehead to the outer limit of the upper part of the face are thirty-three short parallel lines, and running back from the upper part of the forehead are marks that are evidently intended to represent some kind of head dress, as they look not unlike feathers. The forehead is crossed by three parallel lines that look like wrinkles; the nose is partly gone, so that in a profile view it hardly shows at all.

The history of it is as follows: Eighty years ago a man by the name of Christian Spangler found it in some woods in Plain township, Stark county, when cutting trees to build a house. After he died his son came in possession of it, and when he died he left it to his son, who is the man of whom I purchased it. He parted with it because he had no children to leave it to. I was well convinced of its genuineness before purchasing. A number of archaeologists have seen it, and all agreed in pronouncing it genuine.

This photograph does not bring it out as it should; it looks like an etching, when in reality the face is in bold relief.

A. L. PEASE.

LETTER OF MR. KUHN.

CANTON, OHIO, June 8, 1876.

L. Little, Cleveland, O.

DEAR SIR: I hand you a photograph of a rudely cut image of a human being, in black marble. The original is about one-half larger than is represented in the picture. It was found near Marlboro, Stark county, O., by some workmen while digging a well, and said to be twelve feet below the surface, imbedded in sand and gravel. The gentleman of whom I received the photograph informs me that the ground had never been broken, and that it must have been deposited there at some remote period. You will observe that the picture shows a front and side view, and represents the figure seated astride of a stone. The white veins of marble make the figure look rather comical about his mug.

Truly yours, etc.,

R. D. KUHN.

Figure No 2, Marlboro, Stark county, O., one-half nature.



Variegated marble, front view.

LETTERS OF MR. KITE.

DAMASCOVILLE, O., January 31, 1878.

RESPECTED FRIEND—C. WHITTLESEY:—I forward photographs of two images found in this part of our State. The one representing a head (figure No. 4), I now have in my possession, loaned only. It was plowed up in Carroll county. It is slightly disfigured from being struck by the plow, being found on the farm of Elias Willard, near Norristown. The other image from which my photo was taken was found near Marlboro, Stark county, though it is quite possible that other parties have had it photographed, as it has been passed around into several hands. There were four persons present when it was found, and they are all confident that it was in place at the depth of 12 feet. I very much doubted the fact when I first heard of the depth, and made very close inquiry with regard to it. A minute account of the finding was written at the time, but I am not able to lay my hand on it at present. Of this I assured myself: that the persons were honest in their statement, or what they believed to be a fact, yet it might, as suggested, have fallen from the surface.

J. L. KITE.

DAMASCOVILLE, O., February 2, 1878.

C. WHITTLESEY, ESTEEMED FRIEND: In reply to thine of the 20th ult. I will copy a part of the account, which together with photographs of the image I forwarded to the Smithsonian Institute in 1876. "In the summer of 1873, Adam Shriver, living near the village of Marlboro, Stark county, Ohio, assisted by his son and another, was engaged in digging a well. They had reached the depth of 12 feet, through a very compact yellow clay, in which were found many water-rolled stones such as are usual in the drift, when a vein of gravel was reached. As a bucket of this gravel was taken to the surface a small image was found in it by the son. The circumstance of the image being found below such a depth of, apparently, undisturbed drift material seemed so surprising that I have taken some pains to verify the facts, and find there were two persons who saw the young man take the image from out the gravel when the bucket reached the surface. Besides, the family seem not to have been capable of any deception in the matter, as they regarded the color of the stone, a variegated black and white marble, as much more curious than the form."

J. L. KITE.

The variegated marble of which No. 2 is made has not been found in Ohio in place. No attempt was made in this rude statue to carve the hands or feet. On account of the black portions, especially on the right side of the head, this figure looks a little more grotesque than if the stone was of uniform color. The mouth and nose are so grossly out of proportion to the head and body that it is probable this effigy was gotten up as a burlesque.

DAMASCOVILLE, O., December 11, 1879.

CHARLES WHITTLESEY: ESTEEMED FRIEND: I send thee photo of a stone image No. 3, found near the Pennsylvania line in this county, while the making of the Sandy and Beaver canal was in progress, some forty years ago. It came into possession of a farmer, who in building a new barn had a niche made for it where it became the target for the stones thrown by all the "small boys" in the neighborhood, and was thus sadly damaged, the chin, lips, nose and eyebrows being broken away. It has been sent to the Smithsonian, on loan. Secretary Baird reports on behalf of those who are accounted authority there, that there is no doubt but that it is a prehistoric relic, and that it was probably carved on the point of some projecting rock.

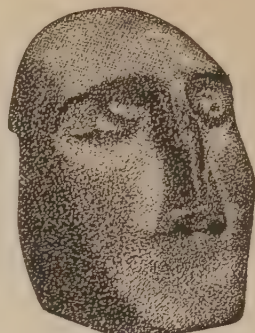
The material is a coarse sandstone. The head is full size. It is only within the year that it has come to the notice of those who appreciate its value. Belongs to J. F. Benner & Son, New Lisbon.

Respectfully, thy friend,
J. L. KITE.

Figure No. 3, one-fourth nature—sandstone. Figure No. 4. Sandstone—Size of Nature.



If the above figure had not been seriously battered it would be the best formed head that has fallen under our observation.



Surface, Norristown, Carroll county, Ohio—Cabinet of G. G. B. Greenwood, Esq., Minerva, Carroll county, Ohio.

The expression of this face is decidedly Indian, which is more manifest because there is no attempt at ornamentation.

WESTERN RESERVE
AND
Northern Ohio Historical Society.

NO. 53. MARCH, 1881.

INSCRIBED STONES, LICKING COUNTY, OHIO.

By COL. CHAS. WHITTLESEY.

IN my first discussion of the reliability of inscribed stones in the United States, purporting to be from ancient earth mounds (Tract No. 9, Western Reserve Hist. Society, February 1872), I stated that the notorious "*Grave Creek Stone*" was generally regarded by archeologists in this country to be a forgery. In the same paper will be found a more full reference to the inscribed stones fabricated by DAVID WYRICK, of Newark, Ohio, in the year 1860.

Some additional facts have been obtained since the date of Tract No. 9 bearing upon that fraud. In regard to the Grave Creek Stone, the use made of that production at the Congress of Americanistes, held at Nancy, in France, in 1875, induced me to treat more fully upon it in Tract No. 33, of November, 1876, and in Tract No. 44, of April, 1879.

In the proceedings of the same Congress, the brochure of SAMUEL H. BARLOW, M. D., of New York, and N. ROE BRADNER, M. D., of Philadelphia, dated July, 1873, presented by Mr. H. HARRISSE, relating to another inscribed stone from Newark, Ohio, was published, with an engraved fac simile. There was such a want of precision in this statement, that it was received with much suspicion, especially by the school which holds that there are no Semitic records in America.

The caption affixed to the article, (see page 191, Vol. 2,) of the Proceedings at Nancy, reads thus; "Monsieur Henry Harrisse,

of New York, presents to the Congress of Americanistes the following papers, and the fac simile of an inscription professing to be Hebrew, discovered about 1867 in a mound in the valley where Newark, Ohio, is situated."

In a note, the Committee of Publication say: "We publish under all proper restriction, a copy of the Newark inscription and the documents in support of it, hoping that the Congress at Luxembourg, will examine very closely the Hebrew works of which Messrs. DAVID M. JOHNSON and W. ROE BRADNER have become the editors."

There are three engravings purporting to be fac similes of these inscriptions, purporting to have been found upon four faces of a pyramidal stone. I give herewith a copy of two of these engravings. The third is not of such size or shape, nor are the inscribed characters in any way so related to those here given, that I can discover the connection between them.

What purports to be either another or two other faces of the same stone, or of something else, is as yet too imperfectly described to be used or understood.

Fac simile of two faces of the Johnson stone—size of nature:



Dr. Bradner asserts that the stone was taken from the same mound where Wyrick procured one of his inscribed stones, by

David M. Johnson, of Coshocton, Ohio, in 1867, who had become the owner of the Wyrick finds. It is stated that Mr. Johnson took laborers with him and spent several days exploring the mound. He found, at a depth much greater than Wyrick had reached, numerous skulls and bones, an altar of stones and hardened mud, ashes and other relics, which he removed to his home. Mr. Johnson, during the same year, gave one of the skulls and some other relics to Dr. Bradner, who packed and sent them to Philadelphia. The skulls were imbedded in moist clay, ashes or dirt, which held the parts together, but when, some months afterward, Dr. B. opened the box and handled the contents the bones fell apart, and a *four-sided pyramidal stone*, about three (3) inches long, was seen among the refuse matter *which came out of the skull*. It closely resembled in shape the one produced by Wyrick from the Newark ancient works in 1860; the size was about one half, and on the four sides were engraved characters in old Hebrew. (See engravings above.) The fac similes, purporting to be from photographs, show two faces of this stone.

Another figure, which may represent two other faces joined at the base, has characters with little or no resemblance to those here given.

According to Wyrick's pamphlet, issued soon after 1861, but without date, his second discovery, consisting of the stone box containing a black stone with an effigy of Moses and the ten commandments, was found at the base of the great mound of loose stone, originally about forty (40) feet high, situated eight (8) miles south south of Newark, near Jacktown, a short distance beyond the National road. A large part of the loose stone of this mound when I first saw it, in 1838, had been carried away. At the base were found low mounds of clay, which Wyrick opened. In his pamphlet he says the stone box was buried twenty (20) feet in the earth, and was exhumed on the 1st of November, 1861. In one of the clay mounds were the remains of a log, on which were seven copper rings, and the remains of a very coarse cloth. Beneath this was a trough of wood, well preserved in the clay, more cloth, ten copper rings, human bones and hair; all of which were taken out and the rude wooden sarcophagus was then covered. In the excavation of November, 1861, he says there were

five persons present, laboring to remove the clay, from morning until 3 P. M.

Near the bottom of the clay, but apparently not in contact with the wooden sarcophagus, he says that he discovered the stone box and its contents.

In a written statement, which JUDGE S. BUCKINGHAM, of Newark, Ohio, has furnished me, it appears that DR. NICHOLS and JOHN HAINES, of that place, had stated to him that they were two of the persons present when Wyrick found Moses and the ten commandments. Dr. Nichols discredited the antiquity of the inscribed stone and the box, and stated that Wyrick had been there alone, before he invited the party to go with him.

At Newark more credit was given to the statements of Wyrick than of Nichols, which so much annoyed the latter, that he fabricated two or more specimens, to show how easily people could be deceived. He said that two of them were afterwards found in a mound on the land of Mr. S. A. WILSON, in Madison township, Licking county.

Whether these are some of those which came into the possession of Messrs. Johnson, and Bradner the present state of our information does not allow an answer. On the part of the supporters of the genuineness of the Johnson finds, they point to the bad reputation of Nichols for veracity. Haines is not to be found. The secrecy and the cunning displayed by the tribe of fabricators and the reluctance which their neighbors evince in committing themselves, gives to the forger a manifest advantage. He has besides these many circumstances in his favor, no reputation to lose. In my endeavors to obtain facts I find a disinclination to reply to letters, and a hesitation to answer oral questions. It is not yet practicable to explain several parts of the testimony which I have, that are clearly contradictory. The mound referred to by Dr. Nichols in Madison township, is near Newark, on the east.

When Dr. Bradner refers to more than one mound, from which Wyrick took engraved stones he does not appear to be aware that his first pyramidal, or "key stone," was not taken from a mound, but from the bottom of one of those circular de-

pressions which are common in our ancient works, similar to the "estufas" of the ruined pueblos of Arizona and New Mexico.

Since the above was penned I have received from Mr. D. M. JOHNSON a letter, dated at Pelham Manor, near New York, June 9, 1879, from which I make the following extract:

"The mounds I opened were the centre and one of the outer circle of earth mounds, originally covered by an immense stone mound, at Jacktown, Licking county, O. The stones were used as protection stone on the canal bank, and the earth mounds were exposed at the time the stone was removed. Mr. D. WYRICK, of Newark, opened one of the small earth mounds, and found, among other things, the famous "Decalogue Stone," which is now in my possession.

"The small stone owned by Dr. Bradner was taken from the centre mound, or altar, at about four feet from surface.

"I have also the 'Key Stone,' with Hebrew inscriptions similar to those on the 'Decalogue Stone,' also found by D. Wyrick."

Mr. Johnson purchased the Wyrick stones, believing them to be genuine. He was not aware that there was anything artificial in the Bradner skull. It is incredible that the stone described in the Harrisse paper, (*Compte Rendue Nancy 1875*), should have been originally within it. How many inscribed stones were fabricated by Nichols and Wyrick no one knows, and therefore it cannot be predicted how many may be found hereafter. I have delayed this publication hoping to procure more definite information. Every one appreciates the difficulty of substantiating a negative, in a matter where there are so many motives in favor of concealment.

THIRTEENTH
ANNUAL MEETING
OF THE
WESTERN RESERVE

AND
Northern Ohio Historical Society,

AT
CLEVELAND, OHIO,

MAY 10, 1881.

TRACT NO. 54.

CLEVELAND, OHIO:
LEADER PRINTING COMPANY, 146 SUPERIOR STREET.
1881.

Officers of the Society.

1881-82.

PRESIDENT.

COL. CHARLES WHITTLESEY.

VICE PRESIDENTS.

ELISHA STERLING. M.D., D. W. CROSS, W. P. FOGG.

ELECTIVE CURATORS.

To May, 1882.

JOHN W. ALLEN, JOSEPH PERKINS,
CHARLES WHITTLESEY.

To May, 1883.

DAN P. EELLS, HENRY N. JOHNSON,
G. E. HERRICK.

To May, 1884.

C. C. BALDWIN, SAM BRIGGS,
LYMAN LITTLE.

PERMANENT CURATORS,

WM. J. BOARDMAN, WM. BINGHAM, BEN. STANNARD,
JAMES BARNETT, GEO. A. TISDALE,

SECRETARY AND TREASURER.

C. C. BALDWIN.

LIBRARIAN.

HENRY N. JOHNSON.

PROCEEDINGS.

THE Thirteenth Annual Meeting of the WESTERN RESERVE AND NORTHERN OHIO HISTORICAL SOCIETY was held on Thursday evening, May 10th, 1881, at the Hall in the Savings Bank Building.

Mr. JOHN W. ALLEN was chosen Temporary Chairman, in the absence of the President, Colonel WHITTLESEY.

The Secretary, Mr. C. C. BALDWIN, read his Annual Report, which is as follows:

Secretary's Report.

The growth of the collections of the Society has been as steady during the past year as in former ones. It is easy to see that its library and museum are increasingly attractive to the public, its museum largely to non-residents of the city. There are few places where visitors can, at a glance, learn so much of the early history of the West. The number of visitors for the year ending May 1st, 1881, was over five thousand. Of course, the museum has received the most attention; sometimes the rooms have been quite full. The library, however, has been used pretty steadily.

THE FINANCIAL REPORT

For the year ending May 1st, 1881, is as follows:

On hand last year.....	\$ 60 35
From Endowment.....	547 95
From Annual Membership, net.....	162 00
Life Membership, D. P. Eells.....	100 00
Life Membership, E. N. Winslow.....	100 00
From other sources.....	96 50
Total.....	\$1,066 80

Of these life-memberships, Mr. EELLS' was taken to assist in building a gallery, and Mr. WINSLOW's with the understanding that the money should be turned over to the Coin Committee. The disbursements were:

Expenses of Room, Librarian, Janitor, Coal and Gas.....	\$ 285 29
Library.....	267 76
Printing, etc.	24 75
Scrap Books, etc., for Local History.....	60 05
Galleries.....	242 39
Miscellaneous.....	72 78
To Coin Committee.....	100 00
Total.....	<u>\$1,062 02</u>

Leaving a balance to new account of \$4.78. As seen, the expenses in some respects have been heavier than usual.

THE GALLERIES

At the north end and west side of the rooms have been long needed. The books have been crowded, and their systematic arrangement was interfered with. It is impossible to have every book in its place, unless there is a place for every book. The gallery on the west side is substantial and roomy. The two add a floor room of six hundred square feet.

The total expense of this improvement, \$242.39, is less than we expected, and a most excellent investment. Mr. EELLS took a Life Membership to help; \$96.50 came from another friend; and the balance is paid by current income.

REPORT OF FUNDS.

The Financial Report of the Secretary, for the year ending May 1st, 1880, of funds passing through his hands only, is as follows:

From previous Account.....	\$ 24 99
Membership, net.....	152 00
Endowment.....	415 33
Total.....	<u>\$ 502 32</u>

Disbursed by him:

Printing and Binding.....	\$ 59 95
Salaries and Room.....	262 56
Miscellaneous.....	21 76
Books.....	190 70
	\$ 531 97
Forward.....	\$ 60 35

The Annual Report for 1879 shows a general balance of \$64.78, of which \$24.99 was in the hands of the Secretary.

LIBRARIAN.

In February last, Mrs. J. C. SCHERMERHORN, who has so long and efficiently filled the position of librarian, resigned. The friends of the Society will be sorry that she could not longer assist us.

Mr. HENRY N. JOHNSON has consented to fill the position at a very happy time for us. The galleries were just to be builded, and there has been much labor which a lady could not attend to, but which has been managed by him with great economy to us. He has progressed largely in the more complete

CLASSIFICATION OF THE LIBRARY,

And re-arrangements of the books, so that by subjects they can be instantly found; and I have no hesitation in saying that they will, when he is done, be in very systematic order. He will then arrange the manuscripts. His heart is in this work, and they will be very easily accessible for use.

It is expected that a Visitor's Guide will be prepared and issued, intended as a popular introduction to the museum, with a few neat illustrations. The expense will be provided for without drawing upon the general income of the Society.

NEW TRACTS.

The Tracts published since the last printed report are:

- No. 48. Annual Report of 1879, and Obituaries.
- No. 49. Girdle Road; by C. C. Bronson Major Wilkins' Disaster; by J. P. Kirtland.
- No. 50. Indian Narrative of Judge Hugh Welch, of Seneca and Sandusky Counties. Wyandot Mission in 1806 and 1807. Judge Atkins' Diary. Prepared by C. C. Baldwin.
- No. 51. General Wadsworth's Division; the War of 1812; by Colonel Charles Whittlesey.
- No. 52. Relics of Aboriginal Art (Effigies); by Colonel Charles Whittlesey. Illustrated.
- No. 53. Inscribed Stones, Licking County, Ohio; by Colonel Charles Whittlesey. Illustrated.

The progress of our Society has been eminently satisfactory. The good use to be made of a few dollars in each department is surprising. There have been thousands of dollars expended in the Library and Museum, which did not come out of our endowment or current funds. We have had warm friends, some of whom are no more. Obituaries of some who have deceased the past year accompany this report.

THE FUTURE.

In making out such a report as this, the natural conclusion is, what next? First, we would like more young men to take an active part in the work. We have room for them. Whether they care for pre-historic antiquities of the State; for general archæology, Western history, pre-historic, Indian, French, English or American; for family history, heraldry or local history, coins or scrip; we can furnish them a library valuable in its aid, and an interesting museum. Gentlemen interested in any of these departments can be of value to the society, as well as the society and its collections to them.

We deserve also a Publishing Fund, which will enable us, in these days of much and cheap printing, to make a handsomer exhibition of our wares. The Society has valuable books, manuscripts and museum, perpetual rooms, and an endowment large enough to secure its support; and it deserves of its friends a better introduction to the public.

The President's Annual Address.

The Secretary also read the Annual Address of President WHITTLESEY, entitled "*The State of Ohio—Sources of her Strength*," which will be published as Tract No. 55.

The President also made the following communication:

Letter of M. Pierre Margry.

The President of this Society has received a letter from the distinguished author, who is now publishing nine volumes of manuscript documents, relating to Canada and Louisiana, ordered by the Congress of the United States. This Society, in 1873, originated the movement for these publications by the Federal Government.

The letter is dated at Paris, April 23d, 1881, from which a few sentences only are here given. After a friendly and complimentary acknowledgment of the receipt of a certificate of life membership, being one of those provided for by the late LEONARD CASE. He says:

"I am thankful that Providence has permitted me to reach my fourth volume, and to show two such grand figures as LASALLE and D'IBERVILLE. I expect soon to reach the sixth volume, wherein, in the discoveries of the Rocky Mountains in 1752, I shall do justice to GAUTIER DE VARENNES and LAVERUNDRIE, who are similar characters. It is a great thing to exhume such memories. I seem to feel them to be living and experience a sense of contact with the noblest part of humanity.

"I hope to complete the series during the Presidency of General GARFIELD, who was my best patron in Congress. In the preface to the French editions, I refer to the part your Society took in procuring these publications. I also reply to your question, why so little remains of the writings of LASALLE prior to 1678. A part were lost in the attack of the Irriquois on his Illinois fort in 1681. In 1687, when he was assassinated, his brother, the Abbe CAVALIER, burned most of those that were with him. I can assure you, that the charts of 1682 and 1687 show traces of his discoveries on the Ohio and the Wabash, as I have said in my third volume. There are twenty charts, which, if Congress can publish, you will be fully satisfied in that respect."

Obituaries.

Following the Address of President WHITTLESY, the Secretary read the following obituary sketches, also prepared by him:

Leonard Case, Jr.

In 1864, the late Mr. Case was left sole heir to an immense estate in this city. This property he regarded as a trust and not an acquisition, and determined not to use it for private or selfish purposes, but as an almoner for the public. The principal part of his patrimony consisted in real estate, producing comparatively little income. He was thus limited in the execution of his plans for the benefit of his native city and its institutions. Unfortunately, he inherited a very defective physical constitution. The last half of his life was an incessant struggle with disease, which, being hereditary, left no hope of relief. If he had been possessed of a vigorous body, his munificent designs would have been more fully developed. None of them were decided upon in haste, but only after mature deliberation, unaffected by advice or solicitation. His modes and conclusions were original and independent. He had a capacious mind, that embraced many subjects; but his genius lay more particularly in the direction of high mathematics, astronomy and natural philosophy. Physical geography also occupied his attention, but with less persistence than the exact sciences. For the purpose of indulging in these studies, he frequently secluded himself, and placed upon his agents the detailed management of his property. Partly owing to the absence of nervous tranquility, he avoided drawing-rooms and general society. Towards his intimate friends his attachments were not only strong and true, but affectionate. He was equally positive in his dislikes. His world lay principally within himself, busy with books, maps and special investigations. This habit was not so much the result of misanthropy as of intense mental occupation. His investigations were carried on with an energy far beyond the

endurance of an excitable nervous system. They led him to misappropriate the hours of rest, to disregard personal comfort, and thus to aggravate his constitutional tendencies. It is easy to see how much such a mind would have accomplished if it had been associated with health and physical strength. Knowing full well that his life would be short, as well as painful, he exerted himself to fulfill the mission he had assumed while life and strength remained. He was never married; dying suddenly and alone, early in the morning of January 6th, 1880, nearly sixty years of age, leaving no will. His benefactions were carried into effect by methods peculiar to himself, and, as far as possible, covered from the world. If the sums he disposed of in that way could be ascertained, they would represent a princely fortune. To this Society, in the past ten years, they exceeded five thousand dollars, all of it without solicitation. He proposed to me to complete the surveys of the antiquities of Ohio as a part of my Society work, but my health did not permit me to do it. Our best books, and the models pertaining to the archæology of the United States, are gifts from him. The publication of the Transactions of the Cleveland Academy of Natural Science—1846 to 1859—was his work.

For every deed of this kind, he was morbidly averse to any acknowledgement, public or private; but now that he is no more, it is our pleasure, as well as our duty, to proclaim how vital his assistance has been to our Association. His talents, learning and liberality will be remembered long after his peculiarities have been forgotten.

W. S. C. Otis.

Mr. OTIS became a Life Member very soon after that plan of securing an endowment was decided upon. He was particularly interested in our project for collecting the Maps, Field Notes and Surveys of the Western Reserve which were not of record. For years he had been an invalid, the result of forty-six years of severe labor in his profession as

an attorney. He was born on a sterile farm in Hampshire county, Massachusetts, August 24th, 1808. It required the closest New England economy and unceasing industry to secure a comfortable living from the soil. There were two others, like himself, of large physical frame, who became very successful business men in Ohio, and finally located at Cleveland. Mr. OTIS aspired to a cadetship at West Point, in which he was sadly disappointed. He resolved, as a large number of our prominent men have done, to attempt an education without the necessary funds. His father approved of the project, but could do little towards it in a financial way. His elder brother, the late WILLIAM A. OTIS, gave some assistance, and in 1830 he graduated at Williams College. In September, 1831, he entered as a law student in the office of WHITTLESEY & NEWTON, at Canfield, Ohio; was in due time admitted to the bar; and from 1833 to 1840 practiced at Ravenna, the county seat of Portage county, Ohio, where he was a partner of the Hon. JOHN SLOANE. From thence he removed to Akron, Summit county, and in 1854 to this city. He was elected a Member of the Ohio Constitutional Convention of 1852, at Cleveland. From 1835 to 1869 he was the Solicitor of the Cleveland and Pittsburgh Railroad Company. The leading characteristics of Mr. OTIS were devotion to his profession, and a great capacity for legal acquisition. He had none of the oratorical graces, but was a clear and exhaustive reasoner. His industry bordered upon a passion. At the bar meeting of the 31st of August, 1879, two days after his death, Judge ANDREWS said: "He was an indefatigable worker, with a character strong enough to resist temptation." And Judge TILDEN: "I have never known a man with greater power of mental and physical endurance." "His habits of labor made inexorable demands upon his strength."

The resolutions adopted by the legal fraternity of Cleveland state: "Forty-six years a member of our profession; by industry, intellectual ability and moral worth he attained the front rank of the profession."

Herman M. Chapin.

Mr. CHAPIN was one of the originators of this Society, one of the Curators and our never-failing friend. It was his oft-expressed opinion, that the Historical Department of the Case Library was of little less importance than the Library itself. The organization of the Public City Library gave additional strength to his position. He was a regular attendant at our annual meetings, and generally at the meeting of curators. A gentleman of high literary tastes, his views of the place this institution should occupy were liberal and broad; his intercourse with the members and officers was earnest, genial and profitable. He died quite unexpectedly, while yet a comparatively young man, at the age of fifty-six years and ten months, on the 24th of May, 1879. His residence in Cleveland commenced in 1848, which was continued until his decease. In 1865, he was elected Mayor of Cleveland by a strong majority, during a prolonged absence from the city. The Cleveland Library, now the Case Library, was an object of his personal attention from the year 1854.

During the war of the Rebellion, he was an efficient working member of the Soldiers' Aid Association, at home and in the field. His career of more than thirty years was distinguished by public spirit, manifesting itself in many ways by personal activity in benevolent and public works.

James A. Garfield.

The delay in publishing the proceedings of our Annual Meeting, for 1881, enables us to insert a brief notice of one of our most valuable Life Members, who has since been taken away in a manner shocking to this and other nations.

General GARFIELD has for years taken an active practical interest in this Society. One of our most valuable tracts was written by him, containing a review of the French and English discoveries west of the Alleghany mountains. It was

re-printed by one of our patrons, and distributed as a memorial on the day of his burial. He was in Congress when we initiated the petition to purchase the Historical Papers of M. PIERRE MARGRY, of Paris, relating to French discoveries in the West, to be printed in nine volumes. General GARFIELD took hold of this project with his usual earnestness. As Chairman of the Joint Committee on the Library, and as a member of the Appropriation Committee of the Lower House, he succeeded in obtaining the appropriation. Four volumes are now in print. In a letter from M. MARGRY, he informs us that he expected to complete the series during the administration of President GARFIELD. At our suggestion, he caused an item to be inserted in the appropriation bill for the centennial year 1876, for the publication of a History of all the Government Surveys from the period of its origin. It failed in the Senate for want of time.

He possessed an unquenchable thirst for knowledge, with a capacity to retain and utilize whatever became the object of his studies. Until his attention was turned to politics, in 1859, he devoted himself to those branches of science and literature which were necessary as a teacher at the Institute at Hiram. In those early days, he was so well grounded in geology that he defeated, in a lengthy debate at Chagrin Falls, a lecturer of long practice, who, under the guise of science, advocated materialism in religion. While a young man in years, he was a leading member in the Councils of the Disciple Church. At the age of thirty he took, at his first session, in the Senate of Ohio, the position of a leading member. When offered the command of a regiment of volunteers, he very much distrusted his ability to succeed in a department wholly new to him. In a few months he gained the battle of Paint Creek, in Kentucky. At Chickamauga, now the anniversary of his death, he became a Major General, and was soon after elected to Congress.

These brilliant successes produced no exhibition of hauteur, and no change in the character of his intercourse with his early friends and neighbors.

As a speaker, he stood very near to the front rank of American orators.

It was this variety of attainments and accomplishments that gave him a hold upon his constituents such as few, if any men have ever had. We see General WASHINGTON, in somewhat magnified proportions, through the haze of time. GARFIELD we had known by contact from a child, with no glamour of time or distance. No man has lived for whose sufferings and recovery more petitions went to the Creator and Ruler of men. Those who never prayed before, were not ashamed to pray for him. No man ever died for whom more, or more sincere tears were shed. It is some consolation for his untimely death, to reflect that it is impossible for the best of men to execute the office of President and not make personal enemies. There is of necessity a difference of opinion as to his acts, by the parties which divide the American people.

His remarks in the House of Representatives on the assassination of Mr. LINCOLN were so appropriate, touching and sublime, that we make a few extracts applicable to the mournful occasion of his own death. The official report in the *Congressional Globe*, on the first anniversary of his death, Saturday, April 14th, 1866, recites that Mr. GARFIELD, in the House of Representatives, after prayer by Chaplain BOYNTON, moved to dispense with the reading of the journal, and said:

“Mr. Speaker—I desire to move that this House do now adjourn; and
“before the vote upon that motion is taken, I desire to say a few words.
“This day, Mr. Speaker, will be sadly memorable so long as this nation
“shall endure, which, God grant, may be ‘till the last syllable of re-
“corded time,’ when the volume of human history shall be sealed up
“and delivered to the Omnipotent Judge. In all future time, on the
“recurrence of this day, I doubt not that the citizens of this Republic
“will meet in solemn assembly to reflect on the life and character of
“ABRAHAM LINCOLN, and the awful tragic event of April 14th, 1865—
“an event unparalleled in the history of nations, certainly unparalleled
“in our own.”

After a brief eulogy upon the late President, and a pathetic allusion to the circumstances of his death, Mr. GARFIELD concluded:

"Ah, sir, there are times in the history of men and nations when
 "they stand so near the veil that separates mortals from the immortals,
 "ay, time from eternity, and men from their God, that they can almost
 "hear the beatings, and feel the pulsations of the heart of the Infinite.
 "Through such a time has this nation passed. When two hundred and
 "fifty thousand brave spirits passed from the field of honor through
 "that thin veil to the presence of God, and when at last its parting folds
 "admitted the martyred President to the company of the dead heroes of
 "the Republic, the Nation stood so near the gate that the whispers of
 "God were heard by the children of men. Awe stricken by His voice,
 "the American people knelt in tearful reverence, and made a solemn
 "covenant with Him and each other, that this Nation should be saved
 "from its enemies, that all its glories should be restored, and on the
 "ruins of slavery and treason the temples of freedom and justice should
 "be built and should survive forever. It remains for us, consecrated
 "by that great event, and under a covenant with God, to keep that faith,
 "to go forward in the great work until it shall be completed. Following
 "the lead of that great man, and obeying the high behests of God, let
 "us remember that

"He has sounded forth a trumpet that shall never call retreat;
 He is sifting out the hearts of men before His judgment seat;
 Be swift, my soul, to answer Him; be jubilant, my feet,
 For God is marching on."

At the conclusion of this peroration, the House adjourned.

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WESTERN RESERVE
AND
Northern Ohio Historical Society.

TRACT 55. NOVEMBER, 1881.

ADDRESS OF THE PRESIDENT,

READ AT THE ANNUAL MEETING, MAY, 1881.

The State of Ohio—Sources of Her Strength.

NOT long before the President left Mentor for Washington, he is reported to have said to a New York politician that Ohio had about all the honors to which she is entitled. The response was, "that she had about all the other States could stand." This sentiment appears to be a general one, not in an offensive sense, but as a widespread opinion, honestly entertained. Whitelaw Reid, in a recent address at Xenia, Ohio, showed conclusively from the blue books, that as to the number of citizens from this State who have held Federal offices, they are not in excess of her share, and are not proportionally equal to those from Massachusetts and Virginia. If it be a fact that our representative men have attained a leading influence in National affairs, it cannot be because of numbers alone; and it should be remembered that they have been raised to place and power, principally by the suffrages of the whole people. If their influence at the Capital is overshadowing, and it is exercised for the good of the Nation, there should not be, and probably is not any feeling of jealousy.

If our representative men are prominent, it may be a source of honorable State pride; for while great men do not make a great people, they are a sign of a solid constituency. Native genius is about equally distributed in all nations, even the barbarous ones; but it goes to waste wherever the surroundings are not propitious. Intellectual strength without cultivation, is as likely to be a curse as a blessing. If it has cultivation and good moral qualities, it cannot even then become prominent without great occasions; and in Republican communities, without the backing of a people equal to the emergency. Leaders are not the real power, only its exponents. Storm signals are not the storm; they are only indications. History clearly shows, that in free or partly free communities, great men rise no higher than the forces behind them. It also informs us that those nations who have been the most powerful, have become so by a mixture of races. Cross-breeding, by a law of nature, fortifies the stock physically, on which mental development greatly depends.

Why the mingling of certain races, like the Teutonic and the Celtic, produces an improved stock, while the same process between Caucasian and Negro or the North American Indian results in depreciation and decay, is one of those numerous mysteries, as yet unfathomed by man. Also, why the greatest unmixed races, such as Mongolian, Tartar, Japanese, Chinese, Hindoo, Arab and Hebrew, soon reach the limits of their improvement. A portion of the Aryan family migrated northwestwardly, mingling with the Caucasian, reaching Europe by the north of the Black Sea. They acquired strength as they spread out on the waters of the Danube, the Elbe and the Rhine, becoming powerful and even dominant under the general name of Goths, having a language from which the Saxon and English were derived. This might be attributable to the medium climate between the Baltic and the Mediterranean, if other people had not enjoyed as temperate climes, and had not gone on increasing, either in mental, physical or political power. When the Celtic and Scandinavian people

had pushed forward to the Western Sea, and met in the British Islands, they were for a long time unable to go farther, and thus had the best of opportunities to coalesce. The Atlantic was finally overcome, and their propensity to migrate was gratified by crossing the sea to North America. This great stream of humanity kept the line of a temperate climate, the central channel of which, as it crossed the continent, occupied the State of Ohio.

In King John's time, an English people existed, who exhibited their power through the barons at Runymede. Cromwell was endowed with a mental capacity equal to the greatest of men; but he would not have appeared in history if there had not been a constituency of Round Heads, full of strength, determined upon the overthrow of a licentious king and his nobility. The English stock here proved its capabilities on a larger scale than in the days of King John. Washington would not have been known in history if the people of the American colonies had not been stalwarts, in every sense, who selected him as their representative. In these colonies the process of cross-breeding among races, had then been carried further than in England, and is now a prime factor in the strength of the United States.

I propose to apply the same rule to the first settlers of Ohio, and to show that if she now holds a high place in this Nation, it is not an accident, but can be traced to manifest natural causes, and those not alone climate, soil and geographical position.

There were five centers of settlement in Ohio by people of somewhat different stock; four of them by people whose social training was more diverse than their stock. Beginning at the southwest, the Symmes Purchase, between the Great and Little Miami rivers, was settled principally from New Jersey, with Cincinnati as the center. Next, on the east, between the Little Miami and the Scioto rivers, lay the Virginia Military District, reserved by that State to satisfy the bounty land warrants, issued to her troops in the war of the Revolution.

It was like a projection of Virginia (except as to slavery), which then included Kentucky, across the Ohio river to the center of the new State. Chillicothe was the principal town of this tract. The pioneers came on through the passes of the Blue Ridge, their ancestors being principally English and Episcopal, but claiming without much historical show, a leaven of Norman and Cavalier. With Marietta as a center, the Ohio Company was recruited from Massachusetts and other New England States. In Colonial times, their ancestors also came from England, but of opponents to the Church of England, in search of religious freedom. One hundred and fifty years had wrought great differences between them and the Virginians. Next, west of the Pennsylvania line, lies the "seven ranges" of townships, extending north of the Ohio to the completion of the fortieth parallel of latitude, being the first of the surveys and sales of the public land of the United States. Most of the early settlers here came over the Alleghanies from the State of Pennsylvania; some of Quaker stock, introduced by William Penn; and more of German origin, in later days. North of them to Lake Erie lay the Western Reserve, owned and settled by inhabitants of Connecticut, with Cleveland as the prospective capital of a new State, to be called "New Connecticut." This tract extended west from Pennsylvania one hundred and twenty miles. West of the seven ranges to the Scioto, and south of Wayne's Treaty line, is the United States Military Reservation, where the first inhabitants were from all the States, and held bounty warrants issued under the resolution of 1776. They were not homogeneous enough to give this tract any social peculiarity. The north-western part of the State was, until the war of 1812, a wilderness occupied by Indians.

The New Jersey people brought a tincture of Swedish and Hollander blood, mingled with the English. Those from Pennsylvania had a slight mixture of Irish, Scotch and Scotch-Irish. The settlers of new communities leave their impress upon the locality, long after they are gone. In Ohio

these five centers were quite isolated, on account of broad intermediate spaces of dense, unsettled forests, through which, if there were roads or trails, they were nearly impracticable. They all had occupation enough to secure the bread of life, clear away the trees around their cabins, and defend themselves against their red enemies. Though of one American family, their environment delayed their full social fusion at least one generation. Their differences were principally those of education, and including their religious cultus, were so thoroughly inbred that they stood in the relation of different races, but without animosity. A large part of them had taken part in the war of the Revolution, or they would have been lacking in courage, to plant themselves on a frontier that was virtually in a state of war until the peace of 1815. The expeditions of Harmar in 1790, St. Clair in 1791, and Wayne in 1792-'94, embraced many of them as volunteers. Full one thousand whites, and more Indians, were killed on Ohio soil before peace was assured. Nearly every man had a rifle and its accoutrements, with which he could bring down a squirrel or turkey from the tallest tree, and a deer, a bear or an Indian at sixty rods. They had not felt the weakening effect of idleness or luxury. Their food was coarse, but solid and abundant. In spite of the malaria of new countries, the number of robust, active men fit for military duty was proportionally large. As hunters of wild animals or wild men, they were the full equals of the latter, in endurance and in the art of success. They were fully capable of defending themselves. The dishonorable surrender at Detroit, August 16th, 1812, became known on the Western Reserve, where the settlements were wholly unguarded, between the 20th and 22d; probably at Washington not before the 25th or 26th. General Wadsworth, commanding the Fourth Division of the State Militia, ordered the Third Brigade (General Perkins) to rendezvous at Cleveland. On the 23d, the men of the Lake counties were on their way, each with his rifle, well-filled powder-horn, bullet-pouch and butcher-knife, in squads or

companies, on foot or mounted; and on the 26th, one battalion moved westward. By the 5th of September, before any orders from Washington reached them, a post was established on the Huron river, near Milan, in Huron county. Nothing but these improvised troops, lay between General Brock's army at Detroit and the settled portions of the State. The frontier line of settlements at that time turned south, away from Lake Erie at Huron, passing by Mansfield and Delaware to Urbana, in Champaign county.

The war of 1812 brought nearly all our able-bodied men into the field, which had the effect to hasten a closer relationship between the settlements. In 1810, there were 230,760 inhabitants in Ohio. The vote for Governor in 1812 was 19,752. Probably the enrolled militia was larger than the vote. It is estimated that for different terms of service 20,000 were in the field. War has many compensations for its many evils, especially a war of defense or for a principle in which the people are substantially unanimous. Few citizens volunteer for military service and go creditably through a campaign, its exposures and dangers, whose character is not strengthened. They acquire sturdiness, self-respect and courage. These qualities in individuals, affect the aggregate stamina of communities and of States. The volunteers in 1812-'14, with a variety of thought, manners and dress, engaged in the common cause of public defense, coalesced in a social sense, which led to a better understanding and to inter-marriages. At that time very few native-born citizens were of an age to participate in public affairs. Tiffin, the first Governor, was a native of England. Senator, and then Governor Worthington, was born in Virginia. Return Jonathan Meigs, Jr., Senator, Governor and Postmaster General, in Connecticut; Jeremiah Morrow, sole Member of Congress from 1803 to 1813, then Senator and Governor, in Pennsylvania; General Harrison, afterwards President of the United States, in Virginia; General McArthur, in New York; and General Cass, in New Hampshire. Nearly all the Generals of

the War of the Rebellion in command of Ohio troops were natives.

When the State had recovered from the sacrifices of the war of 1812, the native element showed itself in public affairs. The Legislature, reflecting the character of its constituents, took high ground in favor of free schools, canals, roads and official integrity. To this day, no disgraceful scandal or corruption has been fastened upon it, or the Executive of the State. Two generations succeeded, their blood more completely mingled, their habits more thoroughly assimilated, their intelligence increased, public communication improved, and in 1861 wealth had not made the people effeminate. Such are the processes which, by long and steady operation in one direction, brought into existence the constituency which rose up to sustain the Federal Government. Three hundred thousand men, were found capable of filling all positions, high and low, especially that of efficient soldiers in the ranks. For commanders, they had Gilmore, Cox, Stanley, Steedman, Sill, Hazen, McCook, Rosecranz, McDowell, McPherson, Sheridan, Sherman and Grant, all raised, and except three, born on Ohio soil, and educated at West Point. Was it fortuitous? I think I perceive sufficient causes working toward this result, not for one generation, or for a century, but reaching back to the English people of two and three centuries since. Nations, races and families decay, and it is possible it may be so here; but wherever the broad political foundations laid in Ohio are taken as a pattern, and there is a general mixture of educated Anglo-Saxon stocks, the period of decline will be far in the distance.

On the 4th of March, 1881, three men of fine presence advanced on the platform at the east portico of the Federal capitol. On their right is a solid, square-built man of an impressive appearance, the Chief Justice of the United States. On his left stood a tall, well-rounded, large, self-possessed personage, with a head large even in proportion to the body, who is President of the United States. At his left hand was

an equally tall, robust and graceful gentleman, the retiring President. Near by was a tall, not especially graceful figure, with the eye of an eagle, who is the General commanding the Army. A short, square, active officer, the Marshal Ney of America, is there as Lieutenant General. Another, tall, slender, self-poised man, of not ungraceful presence, was the focus of many thousands of eyes. He had carried the finances of the Nation in his mind and in his heart, four years as Secretary of the Treasury, the peer of Hamilton and Chase. Of these six, five were natives of Ohio, and the other a life-long resident. Did this group of National characters from one State stand there by accident? Was it not the result of a long train of agencies, which, by force of natural selection, brought them to the front on that occasion?

WESTERN RESERVE
AND
Northern Ohio Historical Society.

NO. 56, APRIL, 1882.

Ancient Burial Cists in Northeastern Ohio.

STONE burial cists have been opened in *Illinois*, *Missouri* and *Tennessee*, but those described below, by Mr. BALDWIN, constitute the first authenticated group of this class of remains in Ohio. When first discovered in *Tennessee* they were regarded as the graves of a race of pigmies. When the bones of the Mound-Builders were first uncovered, it was, and still is, a popular belief that they were a race of giants. Their lower jaw bones fit on, over the faces of living men. As the jaw of any person of ordinary size, will go on outside of every other persons, this proof of stature is nothing. It is like persons sitting upon one another, in the lap. The skulls and other bones of the supposed Mound-Builders, like those in Parkman, are found to be, on examination, those of persons of all ages and sizes, often bent and crowded into the least possible space. Parkman is the southeastern township of Geauga county, Ohio.

Letter of Mr. Baldwin.

NELSON, O., March 13th, 1882.

C. C. BALDWIN, Esq.,

CLEVELAND OHIO.

Dear Sir: Agreeably to promise I send you a description of the stone tumulus at Parkman, Geauga county, Ohio, which I explored, or the partial ruins of, in August, 1879.

It is located about one-quarter of a mile north of the south line of the township and county, and about the same distance east of a line north and south at the middle of the township, upon the top of a high bluff running nearly north and south, with the Grand river running southeasterly, and about one hundred and twenty-five feet below the mound, and distant about fifty rods. The mound was built upon the crest of a bluff, and about three rods south of a sharp ravine, running nearly east and west. The ravine is about fifty rods long, and at the lower end cuts through the bluff, and slopes at an angle of about forty-five degrees.

The place is exceedingly picturesque, more so than any other spot for a mile or so along the river, which presents very fine scenery for this part of the country. It is near a salt spring or "*deer lick*," and places which are known to have been much frequented by pre-historic peoples. There are great numbers of rock shelters within a radius of two or three miles from the mound, which show use by fire-marks, debris, etc.

When this country was new, there was a saw mill and a large mill dam, which was much frequented by boys for swimming and rafting. These boys, now old men, tell me they used to collect large numbers of "trinkets," as they called them, some flint chips, arrow heads, stones of slate, with one or two holes in them, skinning stones, celts, and

human bones. In this way the mound was reduced to a partial state of ruin,—one-fourth to one-third of the stone formerly in the mound having been thrown down the bluff. About three-fourths or two-thirds of the stone remained nearly in their original positions. Parties who saw this, before any demolition had taken place, say it was symmetrical in form and about six or eight feet high. Trees of one foot or more in diameter were growing on the mound,—an elm of about that size being nearly in the middle. Of the stone remaining upon the site of the mound, I found that more than one-half of them had been more or less disturbed by the said boys in search of “trinkets.”

This mound was about sixty feet long and about fifteen feet wide at base, tapering, so that it was somewhat conical, or to a blunt point. The stone composing it were generally flat, and in sizes averaging from that of an oyster shell, to about two feet square on surface at top and bottom, and two to four inches in thickness. The stone are of the “Berea grit,” or sandstone, but of irregular stratification. I forgot to mention that west of the mound the land is level or table land. The stone were obtained principally from the southern slope of the ravine, at the east and near the top, while a part of them evidently came from the low lands west, and the slope of the bluff east and southeast.

In exploring the mound, I was assisted by three persons,—my two sons, and a friend by the name of A. W. GATES. Two of us commenced at each end, placing the stone back of us as we took them from the pile, thus making a thorough exploration of the site and the stone upon it. We found that the first work done by the builders was to excavate a small quantity of earth in order to *level the surface* upon which the mound was built, for the ground descended a little toward the bluff. A cut was made of about (on an average) four to six inches in depth and the dirt moved eastward, so as to make a surface nearly on a level about sixty

feet in length by five or six feet in width, and running apparently due north and south. (See diagram.)



c c, line of original surface; space *a*, the fill; space *b*, the cut.

This plat made nearly level was then nicely paved with pretty well selected stones as regards thickness, but of all sizes. No stone of this pavement had been disturbed since first laid down. We removed these all and examined the earth that had been disturbed below. Upon this pavement, stone caskets were walled off with stone or little cells, of about three and one-half feet long by one and one-half feet in width, and flat stones set edgewise to make the partitions between them. I found one of these cells almost entire, and the distinct remains of several others, so I *concluded* that they were built the entire length of the sixty feet. These cells were covered with large flat stones. Quite a quantity of earth was placed in the cells and above them, which was soil taken probably from the surface near by. Above these cells or caskets and around them the mound seems to have been built, by throwing the stone carelessly; except to make the shape heretofore spoken of. The base of the mound when completed was about three times the width of the pavement.

In exploring the mound and its foundations we found flint-flakes, arrow heads, a number of white pebble stones, charcoal, quite a quantity of fragments of *human bones*, in a state of decomposition. Claws from the forefoot of a dog or wolf and bones of the same, in small fragments. Fragments of skulls were mostly found along the *east end* of the cells, while the bones of the feet were along the *west end*. I think the burials were made in a sitting posture, with the feet to the west. Human teeth were found. An ornament made of slate, but of different color and texture than I have before

seen was also found. It was about six inches long by one-fourth of an inch in thickness, and a side view is like the diagram following, perforated with one hole, and highly polished, but rather rude in its outline. I should have mentioned that some few stone in the mound were brought from the river bed below, and are a kind of soapstone.



The ground upon which this mound is built is of a hard yellowish clay, with a very thin soil. A flat stone of about two and one-half inches in thickness, by a length of twenty inches, and a width of about twelve inches, but of irregular outline, which was found over the "cell" before spoken of as being almost entire, has three *hacks* or *marks* made by a tool, perhaps a stone axe or a celt, which are about two and one-half inches in length, and in width about such as would be made by a vigorous blow with some blunt edged instrument.

The "trinkets," I am informed, were largely slate ornaments, with two perforations, or what are sometimes called shuttlestones. The remainder were celts and arrow heads and flakes. This concludes the description of the mound, but the surroundings are also interesting, which I will attempt to describe.

This mound was completely surrounded by *graves*, which answer the description given of what are called "SIX STONE GRAVES," and which were supposed, by some, to be graves of pigmies, on account of being so short. These single graves were built in all respects like the "caskets" mentioned, except there was no pavement underneath, or walled stone at the ends; but flat stones were set at ends and sides, and in all about six or eight in number. A cavity of about eight or ten inches, however, was dug in the ground before setting the flat stones. These graves were also well covered with large flat stones. There were but few of them at the north end of the mound, the largest number were on the west side, or about three-fourths of the whole. These graves, like those

in the mound, were in a partial state of ruin from the same cause, but several were almost entire, and one wholly so, makes me sure of the character of all. Human bones were in the same condition as in the mound. The dirt removed from these graves, I think, was put on the grave with the stone; at all events there was dirt on them and among them. Arrow heads, flint chips, and white pebbles, stones and charcoal were found also in the graves. In the one which had not been disturbed, but had for some reason escaped, (and, as I think, by being partially covered with the stone from another grave, when the search was made), I discovered a beautifully "barred," slate ornament or shuttlestone, which greatly interested me. I had removed some dirt and stones, when I came upon the covering of flat stones which were quite large, and upon removing them, I noticed a number of small thin stones, partially soapstone from the river, directly over the part of the grave containing the heart and breast, placed as represented in the following diagram, which is intended to represent the upper surface of this "nest" of thin stones,



and their upper edges, about twenty in number. The heavy line in the middle represents the slate ornament, also set edgewise in the middle of the "nest." It is about seven inches in length by two inches in width, though tapering towards the end, and about one-eighth of an inch in thickness with two holes near the middle, highly polished and beautifully striped. The thin stones were (or a part of them), placed alongside the ornament, and parallel with it, say about two-thirds of them, the remaining one-third placed crosswise at the ends. I think the burials, both in the mound and outside, were made with a view to effectually prevent wolves and other animals from obtaining the dead bodies.

My experience in exploring mounds is not large, but I am inclined to the opinion that this stone mound is as ancient as the earth mounds, and that the graves around it are nearly as old as the mound itself. The relic found by me I still have in

my collection. It is said that the Indians here, when the whites first settled, knew nothing of the mound or the graves, by tradition or otherwise.

The number of graves around the mound has been variously estimated by different persons at from forty to one hundred. At the time I commenced to explore, I thought it impossible to ascertain, definitely, the number, by reason of the disturbance and confusion made by curiosity-seekers. After consulting with some of those who assisted me, I now make the estimate at sixty, believing that there were as *many* as that.

A few graves partially down the slope, southeast of the mound, seemed to be of different character, there being no large flat stone used in covering, or set edgewise, at ends or sides of the graves. Many of these large flat stone were evidently quarried from the bluff, northeast of mound. I think force was used by wedges and levers in obtaining them. The open seams offered a good opportunity for this kind of work. At all events the appearance of the quarry, seems to indicate, that such was the case. In many cases the flat stone set edgewise at the sides or ends of grave, served for two graves in close proximity at ends or sides.

Yours truly,

CORNELIUS BALDWIN.

FOURTEENTH

ANNUAL MEETING

OF THE

WESTERN RESERVE

AND

Northern Ohio Historical Society.

AT

CLEVELAND, OHIO,

MAY 9, 1882

TRACT NO. 57.

CLEVELAND, OHIO:
LEADER PRINTING COMPANY, 146 SUPERIOR STREET.
1882.

Officers of the Society.

1882-83.

PRESIDENT.

COL. CHARLES WHITTLESEY.

VICE PRESIDENTS.

ELISHA STERLING, M.D., D. W. CROSS, W. P. FOGG.

ELECTIVE CURATORS.

TO MAY, 1883.

DAN P. EELLS, HENRY N. JOHNSON,
G. E. HERRICK.

TO MAY, 1884.

C. C. BALDWIN, SAM BRIGGS,
LYMAN LITTLE.

TO MAY, 1885.

JOHN W. ALLEN, JOSEPH PERKINS,
CHARLES WHITTLESEY.

PERMANENT CURATORS,

WM. J. BOARDMAN, WM. BINGHAM, BEN. STANNARD,
JAMES BARNETT, GEO. A. TISDALE.

SECRETARY AND TREASURER.

C. C. BALDWIN.

LIBRARIAN.

HENRY N. JOHNSON.

PROCEEDINGS.

THE Fourteenth Annual Meeting of the WESTERN RESERVE AND NORTHERN OHIO HISTORICAL SOCIETY was held on Tuesday evening, May 9, 1882, at the rooms in the building of the Society for Savings.

Hon. JOHN W. ALLEN presided in the absence of President WHITTLESEY.

Secretary's Report.

The following was presented:

*Annual Report of C. C. BALDWIN, Secretary and Treasurer,
for the year ending May 1, 1882.*

FINANCES.

At the beginning of the year there was in the hands of the

Secretary.....	\$ 4 78
The income for the last year has been—from Endowments,	686 99
Annual Memberships, 42 at \$5.00.....	210 00
Sale of Coins and Tracts.....	5 45
From a Friend to pay for printing Gen. Garfield's Address.	78 00

Total \$ 985 22

There has been expended—

For Books.....	171 39
Printing.....	168 00
Stationery.....	20 00
Binding.....	54 95
Care of Room.....	45 83
Coal.....	46 60
Labor in Room.....	15 50
In matter of Garfield Relics.....	86 76
Services of Mr. Johnson as Librarian, collecting membership and copying.....	316 00
Miscellaneous.....	51 74
On hand.....	8 45

Total..... \$ 985 22

The income from endowment includes some from previous years, and for that, and also because of the difficulty of investing so as to produce a large profit, it will not be as large next year. The expenditures have kept within the income from necessity. In many directions a needed expenditure might have been very useful, and opportunities never to be had again are passed. A society of this kind, like every other business, prospers with money. The position of the Society is such that from its rooms, collections, and endowment, its permanence and perpetuity is assured; but it deserves wider means of usefulness.

PUBLICATIONS.

The Publications for the year have been—

No. 54. Report of the Thirteenth Annual Meeting, in May, 1881.

No. 55. The Address of President WHITTLESEY at that meeting: "The State of Ohio: Sources of her Strength."

No. 56. "Ancient Burial Cists in Northeastern Ohio," by CORNELIUS BALDWIN, of Portage County.

At the request and at the expense of a prominent friend of our society, our former Tract Number Twenty, the Address of General GARFIELD on "The Discovery and Ownership of the Northwestern Territory, and Settlement of the Western Reserve," was re-printed in a handsome pamphlet and liberally distributed, mostly on the occasion of the funeral of the late President. It was originally delivered in 1873, printed by us in 1874, and aside from the interest attaching to it from its illustrious author, is a careful studious, and most able *resumé* of Ohio history. It seemed to be most acceptable to the many leading gentlemen who received it.

BINDING.

More binding has been done than usual. Much more should be done. Bound volumes of pamphlets have a unique value. Books published as such can in the main be found again: bound volumes of pamphlets, never. Classified and bound they are of easy access and great usefulness. The value of pamphlets

to historical societies is much underrated by the general public, and most pamphlets come to the society through direct solicitation. We have printed and are just about to issue a circular relating to the *Manufactures of Cleveland*, asking for every catalogue, trade list, or other print or publication relating in any manner to any of them. We ask every one to help, and it is to be hoped the response will be so general as to give a fair view of the industries which make our growing city.

THE LIBRARY

has received, by purchase, a number of county and local histories. This is the age of such publications. We ought to have every county atlas and map as well. The number of books added by purchase and donation is: Bound volumes, 233; Pamphlets, 569.

VISITORS.

The number of visitors has been largely in excess of any previous year. The increase has been previously marked from year to year. During the last there have been many more strangers than usual in the city. There are few places in Cleveland for them to visit. The interest felt in everything connected with General GARFIELD and his death has called many to the rooms. Even now, when excitement is quieted, there are not seldom more than fifty visitors in the rooms in a single afternoon.

THE MUSEUM.

The Museum has received much intelligent and patient labor from our zealous librarian, Mr. JOHNSON, and is getting in splendid condition to be easily seen and understood. It is a very systematic museum. The intense interest felt by the whole nation in the death of the late President was such that it can hardly be said that any one but his family had a peculiar interest in him. He belonged to the nation and the world. He has been for years—almost since our organization—a life member of our Society, much interested in its objects and its

success. He lies in Cleveland, and this city will be ever fragrant with his memory. It was felt that there was an unusual propriety in placing in our rooms the dais upon which, in Cleveland, rested his mortal remains, and by the kindness of Hon. R. R. HERRICK, the casket then resting upon it is now there. The whole dais was presented to the Society by the Committee, composed of Hon. R. R. HERRICK, WILLIAM EDWARDS, GEORGE W. GARDNER, HENBY S. WHITTLESEY, BOLIVER BUTTS and H. M. CLAFLIN, representing the citizens who contributed to its erection. At the head of the dais was a fine crayon portrait of President GARFIELD, much admired by all, and the avowed envy of several of the most eminent gentlemen of the nation who wished to purchase it. It might have adorned some more noted room, but our townsman who owned it, Mr. J. F. RYDER, with patriotic and instant fervor, said that if the Society had the dais in its rooms there was but one place for the portrait: at the head of the casket. It hangs there now, the free gift of Mr. RYDER. In their accustomed place are the famous lines:

**"Life's race well run,
Life's work well done,
Life's crown well won:
Now comes rest."**

It will be of interest to know the origin of them. Mr. THOMAS J. DELANO, JR., of Boston, being in Cleveland shortly before the funeral, saw in the store of C. S. MCKENZIE & Co., a lithograph of the President, and he inscribed beneath the Latin lines:

"Cursus vitae bene actus,
Opus vitae omne factum,
Laurus vitae acquisita,
Nunc venit quies."

which attracted much attention in the window.

The County Court House was to be draped, and J. H. RHODES, Esq., and M. G. WATTERSON, Esq., the County Treasurer, seeing the lines, were struck with them. Mr. Wat-

terson translated them as they appeared over the casket, save the second line was:

" Life's work all done."

They were placed in front of the Court House.

Rev. J. D. JONES, chaplain of the Floating Bethel, suggested and furnished them from his note book to the Committee, GEORGE W. GARDNER, President of the City Council, and WILLIAM H. ECKMAN, City Clerk.

The Latin was a translation from an original English poem which, with an account of all, follows this report.

There are now in the rooms the four of the elaborate floral decorations which were selected by Mrs. GARFIELD and restored. They are very fine and life like. The four are: the wreath, presented by Queen VICTORIA, which lay upon the the President's bier; the Harp, presented by the Brazilian Legation; the Cross, Heart and Anchor, presented by the Bolivian Legation; and the Lustral Wreath of the *Nord Americanischen Turner Bund*, of St. Louis. They should be seen by all the members of the Society. The whole number of articles added to the museum is 436.

DEATH OF LIFE MEMBERS.

We have lost several life members during the past year. The greatest loss to our Society, as to all, was President GARFIELD. An obituary notice was issued with the report of the last annual meeting although the death was after the meeting. I have also to report the death of Hon. JESSE P. BISHOP and of Messrs. OSCAR A. CHILDS and AHIRA COBB, all of whom took an active interest in the success of our society. Judge BISHOP was one of the Trustees of our Endowment Fund. Notices of all of them accompany the report.

IN CONCLUSION.

The Secretary may seem to preach too much, but he cannot refrain from commending the care of the Society to its members. The work, or pleasure, should be subdivided. It is as easily subdivided as the work in any factory, and is most interesting in detail. Young men will be welcome, and can find each an entertaining and useful place.

Said the late President in the address referred to: "I desire to call the attention of the young men and women who hear me, to the duty they owe to themselves and their ancestors to study earnestly and reverently the history of the great work accomplished in New Connecticut. It is our sacred duty to rescue from oblivion the stirring recollections of such men, and preserve them as memorials of the past, as lessons for our own inspiration, and the instruction of those who shall come after us. The materials for a history of this Reserve are rich and abundant."

The report of the Secretary and Treasurer was, on motion, received and approved.

Messrs. J. H. WADE, Jr., and J. F. RYDER were then elected life members, and R. A. BROCK, Esq., of the Virginia Historical Society, was elected a corresponding member.

C. C. BALDWIN,
Secretary and Treasurer.

Deceased Life Members.

During the past year three of our life members, residents of this city, have died: Judge JESSE P. BISHOP, OSCAR A. CHILDS, and AHIRA COBB.

Judge Bishop.

In regard to JESSE P. BISHOP* we cannot do better than to repeat the following review of his life and character from the *Cleveland Herald* of October 30, 1881:

JESSE P. BISHOP's armor was honesty and love, which enabled him not only to bide the battle, but also to gain a complete victory. He possessed rare virtues; but if there were any which acted as special motive powers in his life, they were honesty and love. His conception of honesty was such that it might be said of him that he was honest to a fault—for he was many times brought upon himself misfortune in erring on the side of a too punctilious honor. He expended money, gave his aid, without remuneration, as a lawyer; exerted himself day and night; deprived himself of rest and pleasure, in order that he might escape the appearance of evil or avoid doing that which might create a doubt in his own mind, or to enforce honest dealing upon others. His life, socially, professionally and religiously, was grounded upon the fundamental principles of law—"Live honestly, hurt nobody, render to every man his due." He would not accept from his clients, or from any source, anything he had not earned by faithful labor, and has returned gifts made to him by those for whom he had performed some service, because he believed he had not earned them. There is in his office an envelope on which is written, "Pocketbook containing \$136, found by me December 24th, 1874—advertised." which illustrates how he carried into practice his feelings of repulsion in using or receiving anything he had not earned in honesty. There are hundreds who could tell of his true uprightness and invariable honesty. There are hundreds who could tell of impositions practiced upon him by reason of betrayal of his confidence, because he was so controlled by honesty himself that he acted on the presumption that all men were equally upright. There are many who in their grief will cry, "Oh, who will now be my guide, protector and friend—who will be so faithful, so true, so honest with me and mine as JESSE P. BISHOP?"

* JESSE P. BISHOP was born June 1, 1815, and was 2nd son of PETER BISHOP, who died in 1824. His grandfather, JESSE BISHOP, died in Panton, Vt., November 18, 1819, aged 74 years, and was son of RICHARD BISHOP, an early settler in Connecticut.

Judge BISHOP also possessed love to a greater extent, if possible, than honesty. The instances of his large-heartedness and unselfishness are innumerable. To those in need he was a friend in deed and word; to the afflicted a comforter in heart and hand; a sympathizer, giving relief and satisfaction; to all he demonstrated his love by acts of benevolence and benefaction. He would leave his employments to learn and relieve the wants of the poor who solicited his help. His money, his knowledge, and, above all, his heart, were ever ready to render substantial assistance to any who were in want or necessity. To his friends he displayed an anxious desire to assist in every way possible. To his family, as husband, an incessant, unselfish and yearning flood of love rushed from his heart; as father, a wonderful affection shown by his joy at the happiness, by his agony at the sorrow or suffering of his children. Self was forgotten, and others occupied his attention. His example must remain, but what an infinite vacuum will there be by the absence of the practice of those virtues.

Oscar A. Childs.

OSCAR A. CHILDS was born April 12, 1833, in Deerfield, Mass. He was son of *Herrick and Selena (Buckingham) Childs, and of a family settled in Deerfield some two or three generations before.

His parents removed to Cleveland the year he was born, and he resided here until his death. Early in life he engaged in the wholesale boot and shoe business in a small building on Bank street, between Superior and Frankfort streets, and by his sterling merits as a business man, steadily advanced. In 1856 he formed a partnership in the same business under the firm name of CROWELL & CHILDS. After the death of Mr. CROWELL, in 1864, the firm became O. A. CHILDS & Co., and in 1874, CHILDS, GROFF & Co., he having then partially retired from active business, and his brother and other partners taking the more active part. His business was very successful, and by its systematic and able management he benefited not only himself but the city and his customers.

He was at the time of his death also largely interested in other enterprises. He was a modest gentleman who coveted not political or other honors. He was for some time one of the Park Commissioners and did much by his good taste to beautify our city. He was also at the time of

*HERRICK CHILDS was born July 26, 1803, son of DAVID WRIGHT and EUNICE (CLAPP) CHILDS. Doctor DAVID W. was born November 27, 1778, son of AMZI and SUBMIT (WRIGHT) CHILDS. AMZI was son of SAMUEL and SARAH (WRIGHT) CHILDS, born September 21, 1740.

SAMUEL was son of SAMUEL and HANNAH (BARNARD) CHILDS, and born September 20, 1712. Hon. GEORGE SHELDON, Deerfield's historian, thinks SAMUEL was son of RICHARD CHILDS of Barnstable, Mass., and born November 6, 1679.

his death president of the Union Club, and had been for some years a director of the Merchants National Bank.

He was a gentleman of liberal generous public spirit, taking a kindly interest in the welfare of our Society, as well as any other intelligent enterprise. His mind was of a high order, his judgment sagacious and thoughtful. He was a man of varied reading, fond of mechanics and science. He loved travel and the lands beyond the sea. His pastor testifies that his was a broad and generous mind, and that he had a tender reverence for all true practical religion.

The directors of the Merchants National Bank testified well to "his judgment at all times clear, positive and practical; to his character of unsullied integrity; to his readiness as a citizen to contribute both of his time and means to every worthy cause; to his thoughtful, courtesy, large executive ability, and his extreme modesty."

They to his children, and we to all who read this, commend his love of truth, his unwavering devotion to principle, and his delicate sense of honor.

He was out of health for some time, but finally died somewhat suddenly, on the 7th of September, 1881, at the seaside in Connecticut.

Abira Cobb.

MR. COBB died at his residence in this city quite unexpectedly to his friends and himself, on the evening of April 11, 1892. As a man of business, his career, was, in many respects remarkable. His father with the family, removed from Tolland, Connecticut, to the almost unsettled township of Berlin, Erie County, Ohio, in 1819. After the usual hard experience of the Western Pioneer, he died in 1827; and the family returned to Tolland, with great difficulty clearing the land of taxes, and making a sale of it. This son was apprenticed to a trade, as a necessity; but at the age of fifteen he determined to return to Ohio, with the conviction that the new West presented a far better field to hopeful young men than the older States. He came to Norwalk, in Huron County, where he was so fortunate as to become the clerk of JOHN BUCKINGHAM, a merchant and postmaster, in the year 1829. In 1833 Mr. BUCKINGHAM made him the managing partner, in a branch store at Birmingham, in Erie County, Ohio. With a physical constitution that seemed to require no rest, and a mental activity such as few men are gifted with, his combined energies were bent on business. He soon owned the principal mill, the manufactories, workshops and stores of the village. In 1841, as an adjunct to the wheat and flour trade, his life-long friend, Captain ALVA BRADLEY, of Vermillion, and himself built a schooner of 120 tons, of which Captain BRADLEY took command. In 1859 this beginning of

their Lake craft had become a fleet of twelve vessels. Mr. COBB came to Cleveland as a resident in 1853, where he acquired the property known as the Cleveland House, on the west side of the Square, south of Superior street. Substantial buildings soon replaced the decayed wooden tavern and its stables for country teams, until the entire lot became one block under the name of the Forest City House. Before he reached the age of forty he stood in the front rank with the best business men of Cleveland. His perceptions of the future were broad, intelligent and accurate. He was inclined to engage in a variety of enterprises, which to him appeared promising in a growing city, but not as a rash or even as a risky speculator. His real estate was selected with judgment, and improved with substantial buildings, forming the sure foundation of a fortune. He had what is everywhere necessary to success, full confidence in his own conclusions, and in the selection of agents and partners he showed an accurate judgment of men. His conception of the business in hand was so clear, and his contracts were so free from ambiguity that he was seldom involved in litigation. He was in all things a man of positive convictions, freely expressed, but without malice. His capacity for business was more than a talent; it had the breadth and certainty of genius. But his desire to accumulate did not lead him to adopt doubtful schemes, or to acquire money by any but honorable and legitimate modes. An unfortunate difficulty in hearing impaired his social life, and limited his personal associates to very few. He was with them always genial and often jolly, not elated by financial success, but more and more inclined, in a quiet way, to relieve the suffering and to sustain undertakings of general benevolence. There are, therefore, many reasons why the death of Mr. COBB is a public loss to the community.

The *Cleveland Herald* of April 12, 1883, says: "After a life distinguished by earnest and untiring effort, crowned with a commensurate success, ABRAHAM COBB, one of Cleveland's most prominent citizens, and partner in the extensive drug house of STRONG, COBB & Co., after an illness of a week, died quite suddenly last night. He was 67 years of age in October last, and had thus reached nearly the allotted three score and ten. His illness was not considered dangerous, and his sudden death found those who hoped for him many years yet, entirely unprepared for the sad news. The deceased was a man of vigorous habits and took an active interest in business to the last.

Mr. COBB was married in 1839 to Miss MARIA BRYANT, who survives him, daughter of JONATHAN BYRANT, of Birmingham, who moved from New Milford, Susquehanna County, Pennsylvania, in 1815. Eight children were born unto them, seven of whom are now living. In his death Cleveland loses an enterprising and generous citizen, who has been identified with and aided largely in her growth and prosperity."

"Life's race well run,
Life's work well done,
Life's crown well won,
Now comes rest."

C. C. BALDWIN, Esq.,
Cleveland, Ohio,

BOSTON, MASS., May 2d, 1882.

Dear Sir: Your favor of the 28th ultimo is at hand, and I take pleasure in enclosing copy of verses, as requested, just as taken from my scrap book, author's name affixed.

My impression is that the slip was cut from a portion of a newspaper I found in some hotel room, but I am unable to give time, place or name of paper. I think it was written two years past.

I committed to memory the verses, and being in Cleveland at the time of President GARFIELD's death, suggested to my friend, Mr. MCILVAINE, that I should inscribe the first verse as an appropriate sentiment upon the margin of the lithograph of President GARFIELD which he proposed to place in his window. It then appeared and Mr. MCILVAINE can better explain what transpired thereafter. Hoping you may be able to obtain from the above what you desire.

I am yours truly,

THOS. I. DELANO, JR."

Mr. MCILVAINE is the partner of Mr. C. S. MCKENZIE as
C. S. MCKENZIE & Co.

"Itaque Relinquitur Sabbatismus Populo Dei."—*Vulgate.*

Cursus vitae bene actus
Opus vitae omne factum,
Laurus vitae acquisita,
Nunc venit quies.

Res adversae praeterlapsae,
Res tentantes non inventae,
Navis littus jam attingens,
Nunc venit quies.

Cedit nunc fides videndo,
Dies nocti supervenit,
Lux a Jesu impertitur,
Nunc venit quies.

Breve tempus nos manemus,
Sed aut jam aut saltem sero
Portam nobis mors recludet,
Tunc venit quies.

WM. H. CROSBY.

The lines were originally written in English, as appears by the following letter of Rev. HOWARD CROSBY to the Editor of the *Sunday Sun*, of this city:

"*Dear Sir:* The author of 'Life's Race Well Run' is Dr. EDWARD H. PARKER, of Poughkeepsie. It was composed by him in 1879, while riding in his gig. The Latin version was made by my brother, Professor WILLIAM H. CROSBY, of Poughkeepsie. Both English and Latin versions appeared in the New York *Observer*, May 13, 1880. I inclose a genuine copy of the verses, sent me by Dr. PARKER himself. You see it differs from the copy you sent me in having only one 'well' in the first verse.

Yours very respectfully,

HOWARD CROSBY.

116 EAST NINETEENTH STREET,
NEW YORK, SEPT. 11, 1882.

The original poem reads as follows:

"There remaineth therefore a rest for the people of God."

Life's race well run,
Life's work all done,
Life's victory won;
Now cometh rest.

Sorrows are o'er,
Trials no more,
Ship reacheth shore;
Now cometh rest.

Faith yields to sight,
Day follows night,
Jesus gives light;
Now cometh rest.

We a while wait,
But, soon or late,
Death ope's the gate;
Then cometh rest.

SEXAGESIMA, 1879.

E. H. P.

Dr. EDWARD HAZEN PARKER, M. D., is a graduate of Dartmouth College class of 1846, a physician in Poughkeepsie who has received many honors in his profession and is well known as a writer and professor, besides having been President of the New York State Medical Society.

Not being aware that the lines were originally English and desiring to present with this a translation of the Latin in the same metre, the writer handed them to LEVI F. BAUDER, now Auditor of Cuyahoga County, and requested a metrical

translation. The *Sunday Sun*, of September 17, 1882, gives the following account of the result:

Mr. BAUDER did nothing with it at the time, but a week or so later Mr. BALDWIN and Mr. E. R. PERKINS being in the Auditor's office on business, the three sat down, the final versification being left solely to Mr. BAUDER.

The first stanza is that of the inscription, and the whole reads as follows:

Life's race well run,
Life's work well done,
Life's crown well won,
Now comes rest.

All troubles o'er,
We strive no more,
Ship touching shore,
Now comes rest.

Faith yields to sight,
Day conquers night,
From Christ comes light,
Now comes rest.

Brief time we wait,
For soon or late
Death swings the gate,
Then comes rest.

It seems at first quite remarkable that these lines should have in every stanza the rhymes of the original. But surprise disappears when it is remembered that the latter being a translation itself from rhymes, when retranslated into the Saxon, demanded by the short metre, furnishes in each stanza three words that rhyme and form the appropriate closing words.

The following translation was suggested of the first stanza as being nearer the fine sense of the Latin:

Life's race well run,
Life's work all done,
Life's crown just won,
Now comes rest.

But with its history no one can substitute any translation to that which now appears in our rooms.

The origin of the lines has excited considerable discussion, and we learn by letter from Captain FRANK H. MASON, Consul at Basle, that their authorship has been claimed for an Englishman.

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WESTERN RESERVE

AND

Northern Ohio Historical Society.

TRACT NO. 58.

Cleveland, Ohio, January, 1883.

BIOGRAPHY OF EPHRAIM KIRBY,

Director in the Connecticut Land Company in 1795.

BY DR. THEODATUS GARLICK,
Member of the Society.

Dear Sir: In accordance with your often expressed wish, I herewith present your society with a very brief biography of the Hon. Ephraim Kirby, of Connecticut. I regret that it is not more full and complete, but it embraces the more prominent events of his life. During my mother's lifetime she had in her possession a large package of papers and letters relating to Ephraim Kirby. After my mother's death they were taken by Mrs. Ann Kirby Barnum, of Baltimore, (my mother's and E. Kirby's sister,) and sent to St. Augustine for Major Belton to compile, but they never reached him, being lost at sea. I shall therefore have to depend mainly on other sources than family records and family correspondence for information and facts.

And, first. I find in Drake's Biographical Dictionary, the following notice of Ephraim Kirby: "Ephraim Kirby, born in Litchfield, Connecticut," (this is an error, Kirby was born in Woodbury, Conn.) "February 23, 1757; died at Fort Stoddard, Mississippi, October 2, 1804; appointed United States District Judge 1804 by President Jefferson; was in the battle of Bunker Hill, and continued in the service to the end of the war. He was in nineteen battles and skirmishes, receiving thirteen wounds, seven of which were saber cuts, and left on the field for dead. The degree of Master of Arts was conferred on him by Yale College in 1787; a lawyer of eminence in Litchfield in 1789; first reporter of the Supreme Court of Errors in the State of Connecticut; in the State Legislature from 1791 to 1801. His son, R. M. Kirby, a major in the war of 1812."

The following biographical sketch was written some twenty or more years since by an old lawyer of Litchfield for Mrs. Ann Kirby Barnum, and sent by her to Hon. Samuel Starkweather, of Cleveland. The name of the writer is missing with the date:

"Hon. Ephraim Kirby was born in Judea Society, Woodbury, Conn., on a farm now owned by Andrew Hines, Esq. The cellar, over which the house stood still remains. It is situated about eighty rods from General Daniel B. Brinsmade's dwelling house, and to this day is known as the Kirby farm. His father was a farmer in moderate circumstances, and Ephraim was employed on the farm during his boyhood. At the age of sixteen, fired with the patriotism which burst into a flame throughout the country on the news of the battle of Lexington, he shouldered his musket and marched with the volunteers to the scene of conflict in time to be at the battle of Bunker's Hill, and remained in the field until independence was achieved, with only a few intervals, when driven from it by severe wounds. He was in nineteen battles and skirmishes, among which were Brandywine, Monmouth, and Germantown, and received thirteen wounds, seven of which were saber cuts on the head, inflicted by a British dragoon at Germantown, where he was left for dead on the field. These honorable scars he carried with him through life. At the close of the Revolution he rejected with indignation the offer of assistance to speculate in soldiers' certificates by which he might have amassed wealth without labor, but preferring to be penniless as he was than by thus taking advantage of

the necessities of his comrades in arms. By the labor of his own hands he earned the price of his education. He was for some time a member of Yale College and in 1787 the honorary degree of master of arts was conferred on him by that college. Mr. Kirby studied law in the office of Reynold Marvin, Esq., of Litchfield, who had been King's attorney before the war and who relinquished that office for the purpose of engaging in the great struggle for independence. After Mr. Kirby was admitted to the bar he married Miss Ruth Marvin, the accomplished daughter of his distinguished preceptor and patron. In 1791 Colonel Kirby was elected for the first time a representative to the Legislature, a post of honor and responsibility to which he was subsequently re-elected at thirteen semi-annual elections. As a legislator he was always distinguished for the dignity of his deportment, for his comprehensive and enlightened views, for the liberality of his sentiments, and for his ability, firmness, and decision. On the election of Mr. Jefferson to the Presidency in 1801, Colonel Kirby was appointed supervisor of the National Revenue of the State of Connecticut. About this period he was for several years the Democratic candidate for Governor, but as a matter of course, he was always beaten. Upon the acquisition of Louisiana, Mr. Jefferson appointed him district judge of the newly acquired territory of Orleans. Having accepted the office, he set out for New Orleans, but he was not destined to reach that place. Having reached Fort Stoddard in the Mississippi Territory, he was taken sick with yellow fever, and died October 2, 1804, aged forty-seven years, at a period when a wide political career seemed opening upon him. His remains were interred there with the honors of war and other demonstrations of respect. While engaged in the practice of law at Litchfield, in 1789, he published a volume of reports of the decisions of the Superior Court and Supreme Court of Errors of Connecticut. This was a novel undertaking, being the first volume of law reports ever published in America. It was executed with ability and faithfulness, and is still regarded as authority in all our courts. Colonel Kirby was a man of the highest moral as well as physical courage, devoted in his feelings and aspirations, warm, generous, and constant in his attachments, and of indomitable energy. He was withal gentle and winning in his manners, kindly in his disposition, and naturally of an ardent and cheerful temperament, though the

last few years of his life were saddened by heavy pecuniary misfortunes.

"As a lawyer, he was remarkable for frankness and downright honesty to his clients, striving to prevent litigation and effecting compromises. He enjoyed the friendship of many of the sages of the Revolution; his correspondence with whom would form interesting materials for the history of his times, but unfortunately almost all of it was lost at sea between New York and St. Augustine some twenty years since. A few letters to and from President Jefferson are still preserved by his son, Colonel Edmund Kirby, of Brownsville, N. Y., which are interesting as showing the relations of confidence existing between that great statesman and the subject of this sketch.

"Mrs Ruth Kirby, the widow of Ephraim Kirby, died at Litchfield in October, 1817, aged fifty-three years."

The foregoing sketch is in error as to Kirby's being left for dead on the field at the battle of Germantown. The place where he was so badly wounded and left for dead was at Elk River, in the month of September, 1777, previous to the battle of Germantown. Kirby was engaged in a great many battles and skirmishes, and received many wounds, but his worst wounds, the saber cuts in his head and arms, were received in a skirmish at Elk River, if butchering surrendered prisoners of war without arms in their hands can be called a *skirmish*. In all other respects the foregoing sketch, I have no doubt, is entirely correct. The circumstances attending Kirby's entering the army and being so terribly wounded have been so often related to me by my mother and by my aunt, Mrs. Barnum, that I cannot be mistaken about the time when, and the place where, he received those saber cuts in his head. Many years ago Mrs. Barnum and myself were going to Havre de Grace on a steamboat, and as we were passing the mouth of Elk River, my aunt called my attention to that river, saying: "Doctor, there is the place where your uncle Ephraim Kirby was so terribly wounded, and left on the field for dead." She then related to me all the circumstances of the affair, as my mother had often done before. Ephraim Kirby, with other young men of Litchfield county, formed a company of cavalry, and equipped themselves, and furnished their own horses, and went into the service as volunteers. I do not remember at what place they joined the army, but that company of cavalry was engaged in several battles and a great many skirmishes, one of which being

when Kirby was wounded and left for dead. Nearly all the members of this company lost their lives before the close of the war. At the time when our army lay somewhere south of Philadelphia, perhaps on or near the Brandywine, the British under Lord Howe sailed up the Chesapeake and landed a little south of Elk River on the 25th of August, 1777. Some of our troops were left in the rear of the main army north of Elk River for the purpose of keeping Washington advised as to the whereabouts of the British army under Lord Howe. Among the troops so left was the company of cavalry of which Kirby was a member. A portion of this company, I do not recollect how many, were ordered to cross Elk River for the purpose of reconnoitering, and to ascertain, if possible, the whereabouts of Lord Howe's army. This was in the fore part of September. They had to swim the river, and after crossing, dismounted, and were engaged in getting the water out of their boots. Many of them had drawn off their boots for that purpose when they were surprised by a large force of British dragoons and captured. After giving up their arms they were robbed of what little money they had, and also of their watches, and every man except Kirby and a man by the name of Lewis were killed in cold blood. Kirby was supposed to be dead, and Lewis, like old Jack Falstaff, fell on the ground in the melee, and feigned death so well that he escaped. Kirby stood by and under his horse's head, while a British dragoon was belting away at his head with his sword, Kirby dodging the blows as best he could, and fending off with his arms, which were badly wounded. The wounds on his head were fearful, cutting through both tables of the skull and into the brain, a portion of which was lost. Thirty odd pieces of his skull were removed by the surgeon. After the British dragoons left, Lewis got up, and after examining his comrades, he found every one dead except Kirby, who was breathing, but unconscious. Not far from the place where this happened was a log cabin, in which resided an aged widow, who consented to let Lewis bring Kirby to her house, and leave him there until a surgeon could be sent to dress his wounds. Word was immediately sent to his father at Litchfield, that his son was mortally wounded, but contrary to all expectations, his wounds healed kindly, and rapidly, though he still remained unconscious. In the month of December following his father went after him (a great journey in those days), and

took him home to Litchfield. His wounds had all healed, but he still remained unconscious, and no one supposed he would ever recover his mental faculties. But some time in the following May he suddenly sprung from his bed, exclaiming, "Where is Eagle!" meaning his horse. From that moment he was all right in his mind, and remained so until his death. Very soon after this he re-entered the army, and remained in it until the close of the war. Kirby could not have been in the battles of Brandywine and Germantown, as he was lying insensible from his wounds received at Elk River at the time these battles were fought, remaining so until the following month of May. The battle of Brandywine was fought September 11, 1777; the battle of Germantown, October 4, 1777; the battle of Monmouth, June 28, 1778. I have no doubt he was engaged in this last battle, as he re-entered the army very soon after he recovered from his wounds.

Ephraim Kirby's children were Major Reynolds Marvin Kirby, and Major Edmund Kirby, both of whom held commissions in the United States Army, and died during our war with Mexico, being with our army at that time. Kirby had two daughters, the eldest, Catherine, married Major Joseph Smith, of the United States Army, afterwards Judge Smith, of St. Augustine, Fla., the father of E. Kirby Smith, the rebel general in our late Rebellion. The youngest daughter, I forget her name, married Colonel Belton, of the United States Army, and both are still living, as I understand, in Florida. It will be seen by referring to the Early History of Cleveland, that Ephraim Kirby was one of the original thirty-five proprietors of our Western Reserve, of which we are all so proud. This company was known as the "Connecticut Land Company," Kirby being a member of the first board of directors, and, I believe, the company's legal adviser. The names of all the members of this company will be found in Whittlesey's Early History of Cleveland, and the amount of each subscription.

The foregoing sketch contains the most prominent events in the life of Ephraim Kirby. I will, however, add the following extract from a letter from my friend, the Hon. Samuel Starkweather, of Cleveland, as it relates to the genealogy of the Kirby family:

"CLEVELAND, January 2, 1874.

"Dr. T. Garlick:

"Dear Sir: I have received your letter saying you were about to write a short biog-

raphy of Judge Ephraim Kirby, and asking for some facts in relation to the genealogy of the family. His mother was Eunice Starkweather, the youngest child and daughter of John Starkweather, who settled in Stonington, Conn., about the year 1717, where he lived and died, and where he raised a family of eight children, his son Ephraim, my grandfather, being his youngest son, and Eunice, as I have said, his youngest daughter and child. Ephraim, my grandfather, was born September 1, 1733. Eunice, your grandmother, his sister, was born September 19, 1735. In what year she married Abraham Kirby, I don't know. It appears that she named one of her sons, the first-born I presume, after her favorite brother, Ephraim. I have heard him say that he could never have completed his studies at Yale College, where he graduated in 1755, without the help of his beloved sister Eunice. The said John Starkweather, of Stonington, the father of Ephraim and Eunice, was a descendant of Robert Starkweather, in the third generation, who emigrated to Boston, Mass., about the year 1630. From the John Starkweather, of Stonington, have descended all of the name of any note. The Kirby family have been the most distinguished. It is singular that I never heard my grandfather Ephraim speak in the way of boasting of any of his relations, except the Kirbys—the husband and the children of his sister Eunice.

"Of Ephraim Kirby and of his life and times, a most interesting paper could be written if all the facts could be procured. He was certainly one of the most prominent men in Connecticut. He was the champion of Jefferson, and brought down upon himself the whole weight of the Federal power, then dominant and overwhelming. On fast days, the magistrates and clergy of Connecticut would fulminate against Jefferson and his adherents—that day being a privileged day for them, and the clergymen in Litchfield would sometimes be so personal that all eyes in the meeting-house would be turned towards Kirby, as he sat in his pew, as being the one hit, and as he could not talk back, and unable to bear it longer, he left the church, and was one of the principal founders of the Episcopal church in Litchfield, now one of the strongest churches there, and the best

endowed; so true it is, that the blood of the martyrs is the seed of the church. I often detailed these facts to old Mrs. Barnum, your aunt. The part taken by Judge Kirby in the Revolutionary War would be most interesting if it could be written out. Yours truly,
SAMUEL STARKWEATHER."

The progenitors of the Kirby family, of Connecticut, emigrated from Warwickshire, England, in the sixteenth century.

I have attempted to write out the above biographical sketch of Ephraim Kirby, while lying on my lounge and suffering severely most of the time. I am fully aware of its imperfections of style, but the statements, as corrected by myself, may be relied on, and accepted as historical facts.

THEODATUS GARLICK.

BEDFORD, CUYAHOGA COUNTY, OHIO,
January 16th, 1874.

NOTE.—The late Dr. Jared P. Kirtland had recollections of an enthusiastic State Democratic Convention held at Wallingford, Connecticut, at which Judge Kirby was nominated for Governor. It was held in the meeting house, and the crowd was so great that the galleries showed signs of giving way. Some rails were brought in as props, and the Convention proceeded to finish its work.

His name appears frequently on the U. S. Army Registers, generally through the descendants of the daughters. Major Edmund Kirby, an officer of the war of 1812, was his son; also Major R. M. Kirby, who died in 1842. Ephraim Kirby Barnum, who died in 1849, with the rank of Major in the Regular Army, was a grandson on the side of his mother. Ephraim Kirby Smith was another, a graduate of West Point; and a Major killed at Molino Del Rey, in Mexico. His son, J. L. Kirby Smith, graduated from the U. S. Military Academy as Lieutenant of Topographical Engineers, and was engaged on the Government surveys of the Lakes. He was Colonel of the 43rd Regiment of Ohio Volunteers, and killed at Corinth, Mississippi. His uncle, Edmund Kirby Smith, also graduated at West Point, entered the Army and served with credit in the Mexican war. In the Rebellion he turned traitor to his country, joined the Confederate Army, and rose to the rank of Lieutenant-General.

WESTERN RESERVE

AND

Northern Ohio Historical Society.

TRACT NO. 59.

Cleveland, Ohio, September, 1883.

OHIO SURVEYS.

BY CHARLES WHITTLESEY.

The agents, surveyors, and employes of the Connecticut Land Company, celebrated the 4th of July 1796, at the mouth of Conneaut Creek; in all fifty-two (52) persons. Augustus Porter with Seth Pease, John Milton Holly, Amos Spafford, and Moses Warren, their chain men, ax-men, and pack horses, started from the lake shore on the 7th of July, and ran south along the Pennsylvania line, which was established in 1785 and 1786, by Andrew Ellicott, Thomas Hutchins, Alexander McLean, and John Ewing. A stone was set on what they determined to be the 42d parallel of north latitude. This is about two miles south of the shore, the northern boundary of Pennsylvania, and the Western Reserve being at $42^{\circ} 2'$, on a parallel two (2) miles and (24) twenty-four chains north of latitude 42° . This line came to the shore a short distance east of the northeast corner of New Connecticut, as the Reserve was then called, giving to Pennsylvania only a short distance on the lake, where there is no harbor. North of this the country belonged to New York, from which the State of Pennsylvania purchased a triangular tract, extending as far east as the meridian of the west end of Lake Ontario, including the harbor of Erie. The surveyors measured from the stone purporting to be on the 42d parallel south, along the Pennsylvania line, in order to determine the 41st parallel, which is the southern boundary of the Reserve. They could also compare their compasses with the true meridian, on which the Pennsylvania commissioners had run. A part of the field notes and diaries of the surveyors are among the papers of the Western Reserve Historical Society. On the night

of the 7th and 8th of July, Holly's compass varied $53'$ east, Porter's the same, Spafford's $43'$. On the 23d of July they reached the vicinity of the 41st parallel, at a distance of (68) sixty-eight miles, the variation of Spafford's compass being $1^{\circ} 21'$ east. The subject of variations and the discrepancies of their compasses will be found below. The best astronomical and mathematical talent of the colonies was employed on the western boundary of Pennsylvania, which had long been contested by Virginia. It was fixed by a transit sighting from hill to hill, the timber cut away so that the instrument could be reversed, and thus cover three stations, often several miles apart. When the Ohio River was reached the Virginia commissioners retired because that State had ceded the country north of the Ohio in 1784.

The report of the commissioners of Pennsylvania has long been lost, but a portion of the diary of one commissioner exists. As the monuments were nearly all of wood, there were few of them visible, even in 1796. The vista cut through the woods on the summits of the hills gave an approximate line, but this nearly disappeared when the country was cleared. In 1880 a joint commission of three from each State was organized by Pennsylvania and Ohio, to correct the line where it is erroneous, and put up durable monuments. Their final report is not yet published. Seth Pease in his diary states that he traversed the lake shore from the north line of Pennsylvania to the north end of her west line, but does not give the distance. He was the mathematician of the survey, and was provided with a small sextant for determining

the forty-first parallel. All the positions of latitude were somewhat out of place, but it is to the credit of all concerned with their imperfect instruments and few observations, that the errors were so small. Only one day and night of clear weather was allowed for the forty-first parallel. The measured distance from the Pennsylvania stone did not leave the Land Company space enough by nearly a mile, yet the United States claimed that their line was nearly half a mile too far south.

Thomas Hutchins was the geographer to the Confederate States, performing duties now performed by the surveyors general of the public lands. The first surveys were made by him and ten assistant surveyors appointed from different States. The work was done upon a plan conceived of by him in 1764, when he was a captain in the Sixtieth Royal Regiment, and engineer to the expedition under Colonel Henry Bouquet. His plan has been pursued substantially up to this day in the public surveys. He first ran a line west from the north bank of the Ohio, where the State line crosses it, at the southeast corner of Columbiana county, O., as a base, for a distance of seven ranges of six miles each, or forty-two miles, protected against Indians by the military.

This is known as the "geographers' line," terminating on the Nimishillen, near the common boundary of Carroll, Stark, and Tuscarawas counties. From each six-mile post lines were run south as town meridians, to the Ohio and north to the 41st parallel. Every six miles north and south, east and west, formed the boundary of each township, which was designated by double numbers, reckoning from the Ohio northwards as towns, and the Pennsylvania line westward as ranges. Each town was then, as now, subdivided into (36) thirty-six sections of one square mile each. This simplest of all known modes of survey had not been thought of until Captain Hutchins invented it in the wilds of Ohio in 1764. It formed a part of his plan of military colonies north of the Ohio as a protection against Indians.

Hutchins died at Pittsburg in 1788, where his remains now lie unnoticed, in the cemetery of the First Presbyterian Church. The government surveys were purposely left open at the North on account of the unsettled position of the forty-first parallel. The late Dr. Jared P. Kirkland has stated that in 1810, the government employed Andrew Ellicott, and provided the instruments to settle that question. The party traveled with mules and horses. Near Enon Valley the pack-mule

carrying the instruments ran away, and damaged them so much that Ellicott was obliged to return. In 1806 Seth Pease was again placed upon the forty-first parallel, west of the Tuscarawas, but this time by the United States government. The Connecticut Land Company had its surveyors at work west of Cuyahoga, under the general charge of Joshua Stow and Abram Tappan. The south line of the Reserve east of the Tuscarawas being run by the magnetic needle with different compasses that did not agree by several minutes, was of necessity crooked, but it was finally agreed by the government that it should not be disturbed, and the public surveys of the Congress lands were closed upon it. The townships on the Reserve were five miles square. Only the first four ranges or twenty miles of the base line were run in 1796. Pease states that his compass and Holly's agreed, but Spafford's stood to the west of them (10') ten minutes, and that the variation was determined with difficulty. He admits that there were probably errors of (20') twenty minutes. Holly ran the first meridian, which is reputed to be on the lake shore ($\frac{3}{4}$) one-half mile west of the true meridian. The second was run by Spafford and Stoddard, the third by Warren, and the fourth by Pease and Porter. Professor Jared Mansfield, when he was Surveyor General for the territory northwest of the Ohio, examined the line run in 1796 and 1797, intended to be on the forty-first parallel. He found various errors, but reported that, considering the imperfection of the instruments, and the dense and distant wilderness where the work was done, he thought it was creditable to the surveyors and ought to be accepted.

When the southeast corner was established Porter, with a party and a troupe of pack horses, went to the mouth of the Beaver River for provisions. Warren exhausted his supplies while he was fifteen miles from the shore end of his line. All the parties met on the beach, and reached Conneaut creek the same day. Porter immediately commenced the traverse of the lake shore westerly, which he continued to Sandusky Bay. The object of this traverse was to determine provisionally the quantity of land included by a meridian (120) one hundred and twenty miles west of the Pennsylvania line. To their chagrin it was discovered, that when 500,000 acres should be taken from the west end for the sufferers by fire and other causes during the revolutionary war, there was not 3,000,000 of acres left. The "Excess Com-

pany," who expected 500,000 acres between the above grants, were dismayed to find they had nothing. West of the Cuyahoga the Land Company had not acquired the Indian title, but Porter took the risk, and finished his traverse without interruption. Every one must admire the resolution as well as the endurance of all the members of the surveying parties. The qualifications of that class of men were such, that they generally became prominent in civil and military affairs throughout the United States. On the 15th of August four parties arranged themselves on the first meridian to run four parallels westward. At the thirtieth mile post between towns 5 and 6, Moses Warren; at the 35th, Pease; 40th, Spafford and Stoddard; and at the 45th, Holly. They first ran east to the Pennsylvania line, and established the corners of Kinsman, Williamsburg, Andover, and Richmond townships. Holly found the space between the first meridian and the State line, to be nearly one-fourth of a mile too great or 19 chs. 50 l. The next township to the north was still greater. The four parties returned to the meridian and started west across the other three meridians which completed the boundaries of sixteen townships. Beyond this they carried on their parallels until they reached the Chagrin River on the 23d. All of them believed this to be the Cuyahoga, which they were directed not to pass. Holly being on the most northerly parallel, between Kirtland and Mentor, commenced a traverse of the stream expecting to meet General Cleveland at the mouth. The Chagrin River was not on their maps. Anticipating this trouble, Porter, with a party, came from the Cuyahoga by boats to the Chagrin, with provisions and directions to go up the river and inform the surveyors. Holly met this party not far from the lake, where he greeted his friend and future brother-in-law, Porter, who returned to Cleveland the same night. Pease and Stoddard's line between towns 7 and 8, or Newburg and Cleveland, intersected the east line of the Cleveland out-lots at the corner of Willson avenue and Cedar streets. As these were fractional towns, the subdivisions were made as one tract, the lots numbered from 268 to 486. Holly turned back and ran east on the eleventh parallel to the State line at the northeast corner of Richmond, Ashtabula county. The range and town lines north of the sixth parallel were nearly all surveyed in 1796. Some lot lines were run for purchasers in Mentor, and the fifth parallel was extended west from range eight to the Cuyahoga on the

6th of September. This was done by Pease in order to examine the town of Bedford, which was regarded as particularly valuable. With this exception all the space south of the sixth parallel and east of the Cuyahoga was untouched in 1796. The ten-acre lots around the city of Cleveland were not surveyed until 1797. Having finished the city plats and the 100-acre lots in Newburg and Cleveland on the 17th of October, the Cleveland parties joyfully took boats for home at 3:17 o'clock in the afternoon, having accomplished much less than the directors and stockholders expected of them. In 1786 the State of Connecticut had her title to the Reserve so well assured, that she resolved to sell that portion east of the Cuyahoga River at three shillings an acre. In 1788 a land company was formed to make purchases of the State, of which General Samuel H. Parsons, of Middletown, was the leader and manager. He had served with credit through the Revolutionary War, and under the ordinance of 1787 had been appointed one of the judges of the Territory. Captain Jonathan Heart, of Berlin, Conn., afterwards major in the First United States Infantry, also a tried soldier, commanded a company stationed at Venango, Pa., in Colonel Harmar's battalion, United States troops. Captain Heart explored the country east of the Cuyahoga, and enabled General Parsons to locate 24,000 acres at the Salt Springs, on the Meander, two miles south of Niles, in Mahoning county. He also located a tract of land where Cleveland was laid out in 1796, embracing a quarter of a township; but no surveys were made of any part of the Parsons patent. In November, 1789, Judge Parsons was drowned at the falls of the Big Beaver, and his papers lost. He had just parted with Heart at the Salt Springs, who followed the trail west to the Cuyahoga, thence to its mouth, the site of his future town, and down the lake to Erie. The death of the organizer of this company led to the abandonment of everything except the Salt Springs tract. Only two years later Major Heart was killed in the unfortunate battle under General St. Clair.

In its forest condition this region was very prolific in snakes. The notes of the survey contain frequent mention of them, particularly the great yellow rattle snake. In times of drouth they seek streams and moist places, and were frequently seen with their brilliant black and orange spots crossing the lake beach to find water. Joshua Stow, the commissary of the survey, had a positive liking for snake meat. Holly could endure

it when provisions were short. General Cleveland was disgusted with snakes, living or cooked, and with those who cooked them. They were more numerous because the Indians had an affection or a superstitious reverence for them, and did not kill them. Having finished the first four meridians the four inland parties arranged themselves on the first meridian to run the parallels west, after having run east to the Pennsylvania line, and established the township corners, as above noted. Spafford and Stoddard ran the 8th parallel, which came to the east line of Cleveland, along what is now Cedar avenue. Holly returned to the 9th parallel at the west side of range 8, and there ran north to the lake. Between Concord and Painesville he turned east on the 10th parallel, or fifty miles from the base, and ran to the Pennsylvania line at the north boundary of Pierrepont. Thus they proceeded vigorously with their work, frequently measuring and marking twelve miles a day, until all the territory north of the 6th parallel west to the Cuyahoga had been surveyed into townships, fixing the corners where the lines crossed each other. Holly mentions one case where his line fell 20 chains 88 links south of the post set by Warren. On the 6th of September Pease was on the sixth parallel and the eighth meridian, where he ran south one town and then west to the Cuyahoga, between Northfield and Independence. The sub-division of the city of Cleveland into lots was begun on the 21st of September, and completed in October.

In the meantime as parties could be spared the one hundred acre lots that surrounded the ten (10) acre lots at Cleveland were surveyed, and the mouth of the Cuyahoga abandoned on the 17th of October. South of the sixth parallel and west of the fourth meridian was untouched, except the three towns which Pease and Warren had partly surveyed. The employees did not regard their wages as a sufficient compensation for their labor and exposures, in wading swamps and streams, battling with mosquitoes, and at times somewhat empty at the stomach. A strike occurred at Cleveland in September, which was arranged on the 29th by a compact under which the township of Euclid was disposed of to them. Neither Moses Cleaveland, the general agent, Joshua Stow, the commissary, Augustus Porter, the chief surveyor, or John Milton Holly, surveyor, returned to the surveys in 1797.

Seth Pease was then surveyor-in-chief,

with Moses Warren, Warham Shepherd, Amos Spafford, Amzi Atwater, and Nathan Redfield surveyors. The city of Cleveland was allotted in 1796, and the fractional towns of Newburg and Cleveland. In 1797, the ten-acre out lots of Cleveland with three leading roads through them were surveyed, and the townships of Northfield, in Summit county; Bedford and Warrensville in Cuyahoga; and Perry, in Lake county, were subdivided in tracts of 100 acres each. The parallels south of No. 6, were run to the Pennsylvania line, and the meridians from range 4 to the Cuyahoga. Beyond this river they would be in Indian territory. It was a season of much sickness, and of great hardships compared with 1796. William Andrews, Andrew Bicknell, and Pete Washburn died of malarial fever. Joseph Tinker and Daniel Eldridge were drowned. Before the season's work was done, a boatload of fourteen weak, sick, and dispirited men left Cleveland for their Connecticut homes. In the bound volume of early manuscript maps at the historical rooms, there is a skeleton plat of the Reserve east of the Cuyahoga, on which the variation of the magnetic needle is written for nearly every township. There are signs attached to nearly all of them showing whose compass was used, such as Pease's, Porter's, and Stoddard's; and there are besides, in the field notes of the surveyors, frequent memoranda of the observed variations, in 1796 and 1797. In the abstracts here given I do not give each observation nor the precise date, but where there is more than one in a township, give the mean. They were obliged frequently to run several days on an assumed variation. Holly's compass, on the first meridian carried him nearly half a mile too far west. He ran parallels 10, 11, and 12 at 1° 10', 1° 15', and 1° 20', where other compasses show 1° 20', 1° 26', and 1° 30'. An error of 15 minutes, or $\frac{1}{4}$ of a degree, would cause a departure of 40 links in a mile, and in 5 miles two (2) chains. Seth Pease, in his diary of July, 1797, referring to the workings of the compass, says: "From observations made on the various compasses I find I cannot reduce them to a common standard, being differently affected at different places. Of two on the Cuyahoga River, twenty miles south of the lake, one was to the left (west) of the other ten (10) minutes. At Cleveland the one which was to the left stood fifteen minutes to the right, although they were not compared at precisely the same hour of the day."

ABSTRACT OF EASTERN VARIATIONS, BY COUNTIES.

MAHONING COUNTY, NORTH OF BASE.

Poland, southeast corner of Reserve.

Deg.	Min.	Deg.	Min.
Poland, 1796.....	1 23	Berlin, 1810.....	1 48
Poland, 1810.....	1 22	Coitsville, 1796.....	1 20
Boardman, 1796.....	1 31	Youngsto'n, 1796.....	1 30
Boardman, 1810.....	1 37	Austintown, 1796.....	1 23
Cannfield, 1796.....	1 25	Jackson, 1796.....	1 37
Ellsworth, 1796.....	1 36	Milton, 1796.....	1 34
Berlin, 1796.....	1 38		

TRUMBULL COUNTY, 1796-7.

Deg.	Min.	Deg.	Min.
Hubbard.....	—	Warren.....	—
Liberty.....	1 23	Bracev'e (1838) 0	50' 30"
Weathersfield.....	—	Hartford.....	1 —
Lordstown.....	—	Fowler.....	1 20
Newton.....	1 27	Bazetta.....	1 15
Brookfield (1837) 0	42	Champion.....	1 —
Vienna.....	1 27	Southington.....	1 5
Howland.....	—	Kinsman.....	1 20
Vernon.....	1 23	Gustavus.....	1 30
Johnstown.....	1 23	Greene.....	1 23
Mecca.....	1 20	Bloomfield.....	—
Farmington.....	1 12	Mesopotamia.....	1 13
Bristol.....	1 20		

ASHTABULA COUNTY, 1796.

Deg.	Min.	Deg.	Min.
Williamsfield.....	1 30	Pierpont.....	1 15
Wayne.....	1 32	Denmark.....	1 10
Colebrook.....	1 20	Jefferson.....	1 30
Orville.....	1 20	Austinburg.....	1 10
Windso.....	1 40	Harpersfield.....	1 10
Andover.....	1 23	Monroe.....	1 20
Cherry Valley.....	1 26	Sheffield.....	—
New Lyme.....	1 30	Plymouth.....	1 15
Rome.....	1 27	Saybrook.....	—
Harts Grove.....	1 26	Geneva.....	1 20
Richmond.....	—	Conneaut.....	0 53
Dorset.....	1 30	Kingsville.....	—
Lenox.....	—	Ashtabula, '45.....	—
Morgan.....	—	Ashtabula, '76.....	1 45
Trumbull.....	1 22		

PORTAGE COUNTY, 1797.

Deg.	Min.	Deg.	Min.
Deerfield.....	1 10	Charleston.....	1 20
Atwater.....	1 25	Ravenna.....	—
Randolph.....	1 30	Franklin.....	1 40
Randolph (1810).....	2 4	Windham.....	1 12
Suffield.....	1 42	Freedom.....	1 20
Suffield (1821).....	2 5	Shalersburg.....	1 25
Palmyra.....	1 10	Streetsboro (21).....	2 5
Edinburg.....	1 20	Nelson.....	1 13
Rootstown.....	1 30	Hiram.....	1 5
Brimfield.....	1 30	Mantua.....	1 25
Paris.....	1 15	Aurora.....	1 —

GEAUGA COUNTY—1796-7.

Deg	Min	Deg	Min
Parkman.....	1 17	Auburn.....	—
Middlefield.....	1 15	Newburg.....	—
Huntsburg.....	—	Munson.....	—
Montville.....	1 17	Chardon.....	1 5
Thompson.....	1 15	" (1838).....	00 15
Troy.....	1 5	Bainbridge.....	—
Burton.....	1 15	Russell.....	—
Claridon.....	1 5	Chester.....	—
Hambden.....	1 10		

LAKE COUNTY—1797.

Deg	Min	Deg	Min
Willoughby.....	1 5 E	Painesville.....	1 7
" 1876.....	51 W		
Kirtland.....	1 6 E	Leroy.....	1 10
Mentor.....	1 00	Perry.....	1 10
Concord.....	1 00	Madison.....	1 15 E
Fairport 1875.....	49 W	" 1876.....	1 59 W
" 1879.....	2 00 W		

SUMMIT COUNTY, (east of river) 1797.

Deg	Min	Deg	Min
Springfield, 1810.....	2 22	Stow.....	—
Coventry.....	1 30	N. Hampton.....	1 20
" 1812.....	2 30	Hudson.....	1 12
Tallmadge.....	1 30	" 1837.....	1 14
" 1806.....	1 0	Boston.....	1 23
Portage.....	2 2	Twinsburg.....	1 13
" 1838.....	1 15	Northfield.....	1 16

CUYAHOGA COUNTY (EAST OF RIVER).

D.M.S.	D.M.S.
Cleveland, 1796.....	1 30 E
Cleveland, 1830.....	1 20 00 E
Cleveland, 1833.....	0 50 00 E
Cleveland, 1838.....	0 35 00 E
Cleveland, 1841.....	0 20 00 E
Cleveland, 1842.....	0 20 11 E
Cleveland, 1843.....	0 20 00 E
Cleveland, 1859.....	0 46 W
Cleveland Harbor, 1865.....	1 12 00 W
Cleveland Harbor, 1872.....	0 44 52 W
Cleveland Harbor, 1873.....	0 55 54 W
Cleveland Harbor, 1875.....	1 08 00 W
Cleveland Harbor, 1880.....	1 38 5 W
Euclid, 1796.....	1 00 00 E
Euclid, 1826.....	0 30 00 E
Euclid, 1840.....	0 10 58
Euclid, 1841.....	0 7 00 E
Euclid, 1876.....	1 10 W
Solon, 1797.....	1 15 00 E
Orange, 1797.....	1 12 00 E
Orange, 1842.....	0 39 40 E
Mayfield, 1797.....	1 5 00 E
Bedford, 1797.....	1 2 00 E
Bedford, 1842.....	0 40 40 E
Warrensville.....	1 2 00 E
Newburg.....	1 16 00 E

In several instances the surveyors of 1796-7 ran their lines on an assumed variation owing to the differences of their compasses, and the irregularity of their observed variations. Such discrepancies are familiar to all surveyors. The variations on the south line of the Reserve for 1810 were carefully taken by Colonel Jared Mansfield, Surveyor General of the United States, at a time when mathematical knowledge, and field practice were considered necessary qualifications for that office. The late I. N. Pillsbury, C. E., is authority for part of the later observations in Cuyahoga county, and the county surveyors for those in other counties. For the lake harbors, the United States engineers.

Cleveland, August 1883.

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THE

GLACIAL BOUNDARY

IN OHIO,

INDIANA AND KENTUCKY.

BY
PROF. G. FREDERICK WRIGHT.

TRACT No. 60.

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1884.

PREFACE.

HEN, ten years ago, I began my investigations concerning the kames of the Merrimac valley, in Eastern Massachusetts, I little thought to what it would lead; and, after having traced the boundary of the glaciated area from the Atlantic Ocean to the southern part of Illinois, I am equally in doubt as to what the future has in store in this most interesting line of exploration.

The Detailed Report, occupying the larger part of the present publication, is little more than a simple recital of observations, designed to put the reader in my own position, and to furnish the facts which all scientific men would wish to know. I have endeavored to be so specific that future observers may be able to verify my statements, and may intelligently connect their own observations with mine. Whether I shall publish, in equal detail, my observations already made upon Indiana, the future must determine. I hope, however, to continue my investigations across Illinois and Missouri, and may then give fuller details of what I have already done in Indiana.

The preliminary lecture (with its map on page 17), gives the facts concerning Indiana with sufficient clearness to show their relations to those more minutely described in Ohio.

When the present report was written, I had supposed that the joint report of PROFESSOR LEWIS and myself, upon the glacial boundary in Pennsylvania, would already have appeared; and some sentences in my remarks upon Columbiana county, Ohio, presume some degree of familiarity with the views we had presented concerning what is called the "fringe" of the boundary in Western Pennsylvania. As that report will soon appear, it is not necessary to repeat here what will so soon be accessible to the public. Furthermore, my preliminary lecture puts the reader in possession of the general facts.

Among the satisfactory rewards coming to one who engages in such unremunerative, but original, investigations as those

here recorded, is the ready appreciation of his work by so wide a circle of intelligent men whose time is absorbed in other occupations, but who, when the facts are brought to light, are quick to see their importance.

I have, also, had special occasion in these investigations to be thankful for the personal encouragement, appreciation, and advice of such authorities as Prof. CHARLES H. HITCHCOCK, Prof. ALPHEUS HYATT, Prof. E. S. MORSE, Prof. J. D. DANA, Prof. J. P. LESLEY, Prof. EDWARD ORTON, and Col. CHARLES WHITTLESEY. But it is to the CLEVELAND HISTORICAL SOCIETY and its friends that I am specially indebted for the means to prosecute my work in Ohio and Indiana, and that the public is indebted for so full and complete a report of the facts as is here given. The funds directly provided for my expenses, by the friends of the Society, amount to \$450.00, the most of which was contributed by JARVIS M. ADAMS, Esq., President of the New York, Pennsylvania and Ohio Railroad, and Messrs. DAN P. EELLS, JOSEPH PERKINS, and T. P. HANDY. To Mr. ADAMS I am also indebted, both for passes on the railroad of which he is President, and for others secured by his intervention on the Cleveland and Pittsburgh Railway; Cleveland, Akron and Columbus; Cincinnati, Indianapolis, St. Louis and Chicago; Indianapolis and St. Louis; Ohio and Mississippi; Cleveland, Columbus, Cincinnati and Indianapolis; Pittsburgh, Cincinnati and St. Louis.

The cost of the investigations has, also, been diminished by various friends, who have accompanied me and borne their share of the expense, among whom should be mentioned Mr. J. H. KEDZIE, of Chicago, C. C. BALDWIN Esq. (Secretary of this Society, and through whose well-directed efforts the local interest in the subject is largely due), and finally the late lamented Rev. CHARLES TERRY COLLINS, whose sudden death will inflict a loss upon a multitude of philanthropic and educational enterprises. The Rev. Mr. COLLINS was first and foremost among those who set themselves to interest the Cleveland public in this matter, and he was with me two weeks in the field, entering into every minutiae of the investigation with unbounded enthusiasm, and with sagacious appreciation of the whole bearing of the discoveries.

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A LECTURE
ON THE
GLACIAL PHENOMENA IN THE UNITED STATES,
BY
PROF. G. FREDERICK WRIGHT,
GIVEN BEFORE THE WESTERN RESERVE HISTORICAL SOCIETY,
IN CASE HALL, CLEVELAND, OHIO,
NOVEMBER 27, 1882.

NOTE.—When this lecture was delivered my investigations had reached only the Indiana line. During the present summer (1883), I have continued the exploration to the Illinois line, and hence have thought it best to make such changes in the lecture as will give the latest results.

I HAVE been led by the circumstances in which I have been placed, and which I need not here rehearse, to study somewhat extensively the glacial phenomena of the Atlantic States and of the Mississippi basin. By reason of some special familiarity with the subject, acquired by a long residence in New England, I was invited two years ago, in company with Professor H. C. Lewis, of Philadelphia, to trace the southern limits of glacial action for the Geological Survey of Pennsylvania. A full report of our work will soon appear. It is through the thoughtful generosity of several friends of this Society that I have been permitted to continue these investigations in Ohio; and I will take this occasion to return thanks to these gentlemen and to the railroad companies who have facilitated my work. I should also say that both in this State and Pennsylvania our work has been simply supplementary to that of previous surveys. No one can appreciate more fully than myself the value of the glacial observations made by Colonel Whittlesey, Professor Newberry, Professor Orton, Professor Andrews, Mr. M. C. Read, and others of the Ohio Geological Survey. But unity could not well be given to the subject, except one person should go over the whole line, and be able to compare the phenomena of one section with those in another.

GENERAL SURVEY OF THE SUBJECT.

To understand the significance of the glacial phenomena of the State, it is necessary to take a brief survey of the general facts concerning the glacial period. A study of the phenomena of the glacial period gives one an impression of the irresistible power and grandeur of nature's operations, second only

to the study of the geological forces which elevated the continents, and to that of the astronomical forces whose effects are seen in the motions of the heavenly bodies. During the glacial period more than 4,000,000 square miles of the land surface of the Northern Hemisphere was enveloped in glacial ice. In North America this ice sheet extended, upon the Atlantic coast, as far south as Long Island and New York City, and on the Pacific coast to the southern border of British Columbia ;

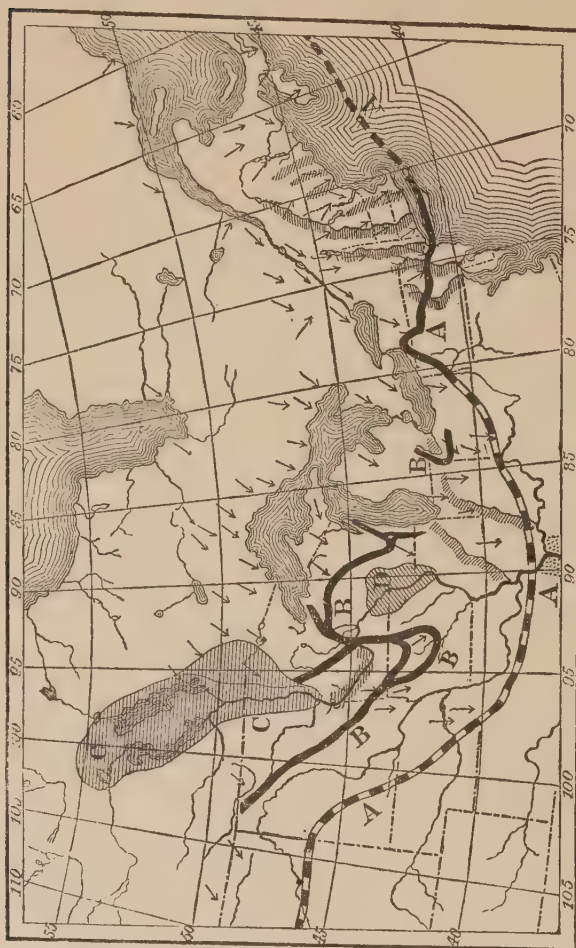


PLATE I. (taken from the author's "Studies in Science and Religion") shows a portion of the glaciated area of North America. AA represents the boundary of the glaciated area. The continuous line is from actual survey in 1881. (For completion to Illinois, see Plates IV. and V. The broken part is still somewhat conjectural). BB marks special glacial accumulations. CG represents Lake Agassiz, a temporary body of water formed by the damming up by ice of the streams flowing into Hudson's Bay, the outlet being, meanwhile, through the Minnesota. D is a driftless region, which ice surrounded without covering. The arrows indicate the direction of glacial scratches. The kames of New England, and the terraces upon the western rivers, are imperfectly shown upon so small a map.

while in the central portion of the continent the glacier everywhere advanced nearly to the Ohio River, and in two places crossed it. The depth of this ice-sheet in America we know to have been at least several hundred feet at its margin, while in the interior it was several thousand feet in depth, or deep enough to cover the highest mountains in New England.

In Europe the land is less continuous than in America, and hence the glacial phenomena are more difficult to interpret. But nearly all of Ireland, the whole of Scotland, and the northern part of England and Wales show marks of long-continued and extensive glaciation. In Switzerland the glaciers formerly extended till they filled the whole valley between the Alps and the Juras, and upon one side flowed down the valley of the Rhone as far as Lyons, which is in a straight line 130 miles from Geneva. The whole distance traversed by that portion of the Swiss glacier was 270 miles. On the other side of the Juras, in the valley of the Rhine, the Swiss ice-current probably met, upon the plains of Germany, the counter current coming down from the Scandinavian peninsula; while in Italy glaciers extended to within a short distance of the river Po, or more than a hundred miles south of the summit of the Alps. The Scandinavian peninsula was completely enveloped with glacial ice, moving southerly, easterly, and westerly, in lines of the least resistance. Upon the shores of the White Sea the motion was nearly east and west. In Finland and in the neighborhood of Stockholm the motion was south, while upon the west coast the motion was towards the Atlantic Ocean.

SIGNS OF GLACIATION.

The signs of glaciation are three-fold, and are unmistakable in their meaning. These are: first, the scratches upon the rocks; second, the till or boulder clay; third, the transported boulders and terminal moraines.

FIRST. *Scratches upon the Rocks.*—All over the regions which we have mentioned the harder and freshly uncovered rocks show abrasion; they are polished. This, however, might have been done by the action of water in rolling pebbles and gravel over them. But this is not all. They are scratched and grooved as if the sand, gravel and pebbles, which abraded them,

had been held in a firm grasp. These striæ and furrows are, in the main, parallel with each other, and they continue across the hard portions of the rock as well as the softer. There are places upon the shores, and among the Islands near the west end of Lake Erie, where many acres together of rocks, thus scratched and furrowed, are exposed, and where frequently the furrows may be traced in a continuous line for a long distance. These are effects which water alone could not produce. Water, by giving motion to pebbles, may polish the rocks over which they are moved, yet it does not give the rocks an even surface, but wears down the softer portions faster than the harder. Only moving ice is competent to produce such polishing and scratching as we have described; and so extensive and uniform is this striation that the theory of icebergs—majestic as they are—is entirely inadequate to account for the facts.

SECOND. *Till, or Boulder Clay.*—The competency of water for the production of the phenomena ascribed to glaciation is excluded also by the character of the superficial deposit which is everywhere found over the area indicated. This deposit was formerly called “boulder-clay,” but, in scientific circles, now goes by the name of “till,” and its character is unmistakable.

Till is an unstratified accumulation, and in this respect differs from all deposits which take place in water. Water is a more perfect sieve than any of man’s invention. It carefully sorts whatever it transports, carrying along the finer material farther than the coarse, and depositing it by itself. Now in the till there is no such separation of the fine from the coarse as water would secure. Fine clay, gravel, fragments of stone of various sizes, sometimes several feet through, are mingled in one indiscriminate mass. The larger part of the material composing till is usually derived from the rocks of the vicinity; but with this there are also mingled fragments that have been brought from a longer distance, sometimes from localities hundreds of miles away. A noticeable peculiarity of the pebbles and fragments of rock which occur in till is that they too, like the rock beneath, are scratched, and usually the direction of the scratches on them is that of the longest diameter of the fragments.

From this description of till it will be recognized, by those who have visited the glaciers of Switzerland, as similar to the accumulation taking place beneath the glacier, and which is called the "ground moraine." In short, the fine material of the till may be compared to the dust with which a lapidary polishes his gems, and the larger fragments to the tools with which he engraves them.

THIRD. *Transported Boulders and the Terminal Moraine.*—A third evidence of the reality of the great ice movement of which we are speaking, is to be found in the character, position and limits of the transported material. This introduces us to the particular field of my own observations. There is a well-defined southern limit to the marks of glacial action in the United States. I have now followed that boundary line nearly all the way from the Atlantic Ocean to the State of Illinois, and can mark it upon the map with nearly as much confidence and accuracy as I can that of the shores of Lake Erie.

a. There are some peculiarities in this line which it is worth while to note, the first of which is the irregularity. As shown upon the maps, the boundary of the glaciated region in North America runs, opposite New England, through Nantucket and Martha's Vineyard, and forms the backbone of Long Island, entering New Jersey at Perth Amboy, just below New York.

It was my privilege, several years ago, in a more definite manner than had been done before, to call public attention to the nature of these accumulations in Southern New England. I was enabled to do this through information furnished me by Mr. Clarence King who gave me the facts in 1876, to be published in a communication to the Boston Society of Natural History upon the Glacial Phenomena of Eastern Massachusetts. (See Proceedings, Vol. 19, p. 62, 1877.) When this clew had once been furnished, it was a short matter to trace the line along the southern shore of New England and through Long Island. This work was done by Mr. Warren Upham.

By independent investigations Professors Cook and Smock, of the New Jersey Geological Survey, discovered the significance of certain glacial accumulations in that State, and a little later published (Report on the Geology of New Jersey for 1878)

a map of the Terminal Moraine in New Jersey. This runs by an irregular course from Perth Amboy to Belvidere, on the Delaware River, a few miles above Easton.



PLATE II. (taken from "Studies in Science and Religion") shows, in addition to the glaciated area of New Jersey, the glacial terraces of gravel along the Lehigh and Delaware Rivers, and also the "Delta Terrace" at Trenton, fifty feet above the river, in which Dr. C. C. Abbott has found palæolithic implements. (For cuts, see Plates VI. and VII., pp. 24, 25.)

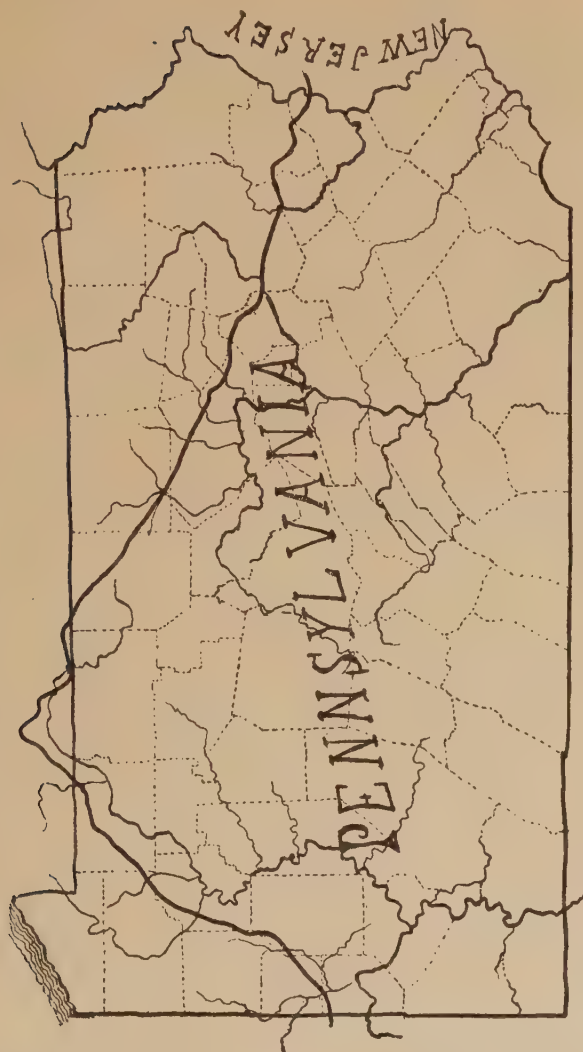


PLATE III. The broad, black line shows Southern Boundary of Glaciated Area of Pennsylvania.

From that point the line runs in a general northwesterly direction to the vicinity of Salamanca, N. Y., and thence southwesterly into Boone county, Ky., across the river from Cincinnati. Thence, by a circuitous route, hereafter to be de-

LIST OF COUNTIES WITH NUMBERS CORRESPONDING TO THOSE IN MAP.

No. I.

1. Williams.	23. Hardin.	45. Pike.	67. Muskingum.
2. Defiance.	24. Logan.	46. Adams.	68. Morgan.
3. Paulding.	25. Champaign.	47. Scioto.	69. Athens.
4. Van Wert.	26. Clarke.	48. Erie.	70. Meigs.
5. Mercer.	27. Greene.	49. Huron.	71. Gallia.
6. Darke.	28. Clinton.	50. Lorain.	72. Lake.
7. Preble.	29. Brown.	51. Richland.	73. Geauga.
8. Butler.	30. Ottawa.	52. Ashland.	74. Portage.
9. Hamilton.	31. Sandusky.	53. Knox.	75. Stark.
10. Fulton.	32. Seneca.	54. Licking.	76. Tuscarawas.
11. Henry.	33. Wyandot.	55. Fairfield.	77. Guernsey.
12. Putnam.	34. Crawford.	56. Perry.	78. Noble.
13. Allen.	35. Marion.	57. Hocking.	79. Ashtabula.
14. Auglaize.	36. Morrow.	58. Vinton.	80. Trumbull.
15. Shelby.	37. Union.	59. Jackson.	81. Mahoning.
16. Miami.	38. Delaware.	60. Lawrence.	82. Columbiana.
17. Montgomery.	39. Madison.	61. Cuyahoga.	83. Carroll.
18. Warren.	40. Franklin.	62. Medina.	84. Harrison.
19. Clermont.	41. Fayette.	63. Summit.	85. Jefferson.
20. Lucas.	42. Pickaway.	64. Wayne.	86. Belmont.
21. Wood.	43. Ross.	65. Holmes.	87. Monroe.
22. Hancock.	44. Highland.	66. Coshocton.	88. Washington.

No. II.

Adams.....	46	Hamilton.....	9	Noble.....	78
Allen.....	13	Hancock.....	22	Ottawa.....	30
Ashland (1242 ft. ab. sea level).....	52	Hardin (1871).....	23	Paulding.....	3
Ashtabula.....	79	Harrison (1180).....	84	Perry (1156).....	56
Athens.....	69	Henry.....	11	Pickaway.....	42
Auglaize.....	14	Highland (1135).....	44	Pike (1285).....	45
Belmont (1170).....	86	Hocking.....	57	Portage (1260).....	74
Brown.....	29	Holmes (1235).....	65	Preble (1044).....	7
Butler.....	8	Huron (1050).....	49	Putnam.....	12
Carroll (1011).....	83	Jackson.....	59	Richland (1400).....	51
Champaign (1158).....	25	Jefferson (1065).....	85	Ross.....	43
Clarke.....	26	Knox (1295).....	53	Sandusky.....	31
Clermont.....	19	Lake (1175).....	72	Scioto.....	47
Clinton (1095).....	28	Lawrence.....	60	Seneca.....	32
Columbiana (1419).....	82	Licking (1816).....	54	Shelby (1058).....	15
Coshocton (1326).....	66	Logan (1550).....	24	Stark (1261).....	75
Crawford (1175).....	34	Lorain.....	50	Summit (1175).....	63
Cuyahoga (1032).....	61	Lucas.....	20	Trumbull (1165).....	80
Darke (1107).....	6	Madison.....	39	Tuscarawas (1491).....	76
Defiance.....	2	Mahoning (1208).....	81	Union.....	37
Delaware.....	38	Marion.....	35	Van Wert.....	4
Erie.....	48	Medina (1117).....	62	Vinton.....	58
Fairfield.....	55	Meigs.....	70	Warren.....	18
Fayette.....	41	Mercer.....	5	Washington.....	88
Franklin.....	40	Miami.....	16	Wayne (1275).....	64
Fulton.....	10	Monroe.....	87	Williams.....	1
Gallia.....	71	Montgomery.....	17	Wood.....	21
Geauga (1232).....	73	Morgan.....	68	Wyandot.....	33
Greene.....	27	Morrow (1148).....	36		
Guernsey.....	77	Muskingum (1161).....	67		

manca, in New York, the change of direction is such as to make an acute angle. Omitting various other deflections in Pennsylvania, you will notice several of a very marked character in Ohio.

The boundary line enters Ohio near Palestine, in Columbiana county, and crosses the county in a direction a little south of west, and as it enters Stark county, trends a little to the north as far as Canton. Here it makes a sharp turn, and runs almost south to the edge of Tuscarawas county, entering Holmes county near its northeast corner, and continuing in a southwesterly course to Millersburg, whence it trends northwesterly to the southern township of Ashland county, where it again takes a very sudden and decided turn to the south, passing through the eastern edge of Knox county; thence through Newark, in Licking county, to the reservoir in the northwestern part of Perry county, continuing in its southerly course to Rushville in Fairfield county. Thence it bends rapidly westward to Lancaster, and again, after crossing the Hocking Valley, turns southward and runs along the boundary between Pickaway and Hocking counties to Adelphi, in the northeast corner of Ross county. Here again it bends westward, crossing the Scioto Valley a few miles above Chillicothe, turning again southward, near Frankfort, and bending around so as to just graze the northwest corner of Pike county, and cross the southeastern of Highland and the northwestern of Adams, entering Brown county near Decatur, and running westward across the southern townships of Brown and Clermont counties, and crossing the Ohio River into Kentucky about two miles north of the line between Campbell and Pendleton counties, whence it bends northward, keeping nearly parallel with the river, and from three to eight miles south of it, re-crossing the river near Woolpers Creek, five miles south of Petersburg, and entering Indiana a little below Aurora.

In Indiana, the line still continues to bear in a southerly direction through Ohio and Jefferson counties, grazing the edge of Kentucky again opposite Madison and reaching its southernmost point near Charleston in Clarke county, Indiana. From here it bears again to the north through Scott and Jackson

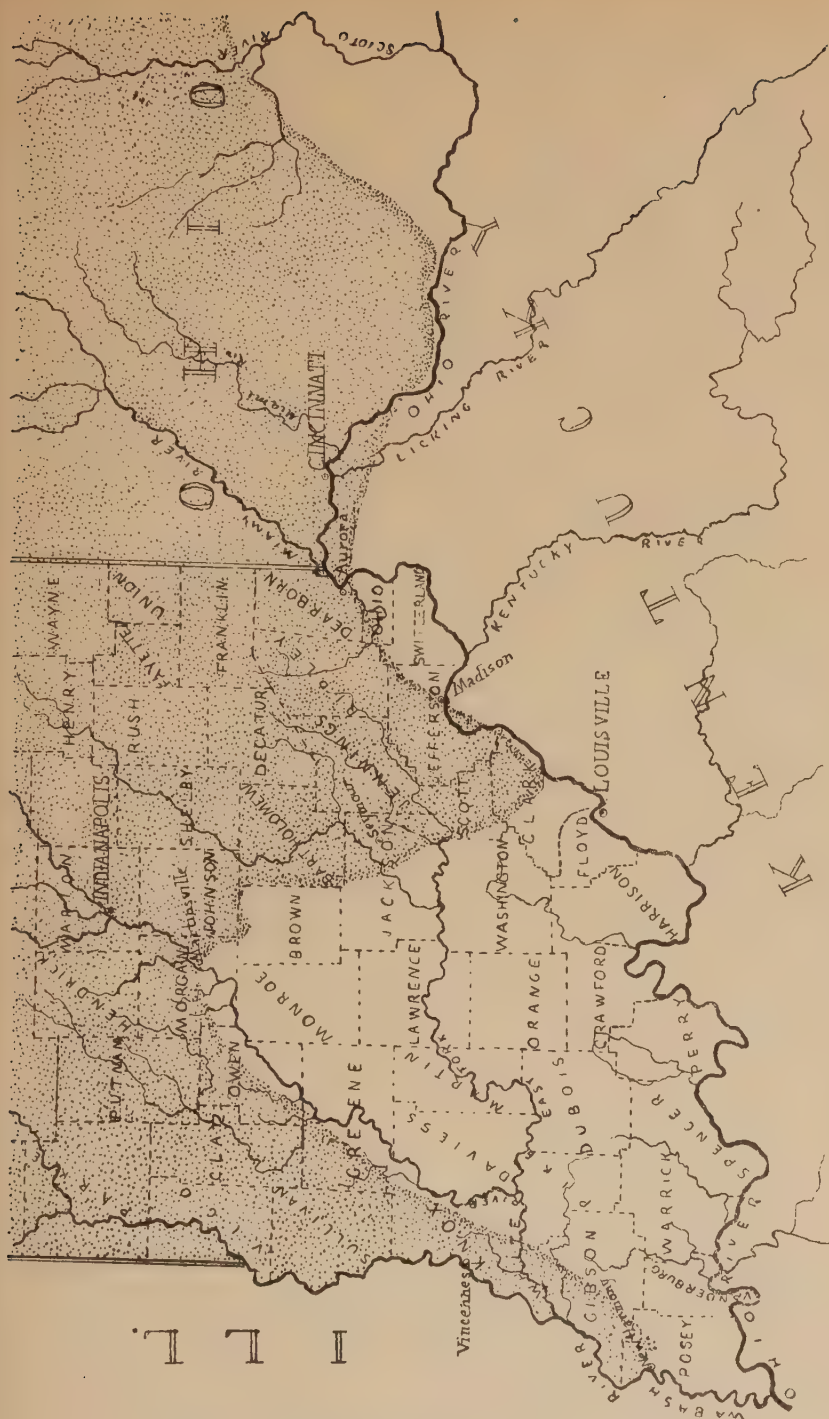


PLATE V. Map of Southern Indiana, showing Glacial Boundary.

counties to the line between Bartholomew and Brown, and follows this to the northeast corner of Brown. There again it turns to the southwest, touching the northeast corner of Monroe, where it again bears north for ten miles, to near Martinsville in Morgan county. Here again the line turns west and south, passing diagonally through Owen, Greene, Knox, and Gibson counties, and into Posey county as far as New Harmony, where, for the present, I have left it.

To account for these curves is a problem to which we will return a little later.

7. A second class of peculiarities to be noted in this boundary line is its irregularity as to elevation. Nowhere is there manifest any barrier such as would limit a body of water, and the line rises over mountains and descends into the valleys with apparent indifference. South of New England the accumulations forming the terminal moraine are often below the level of the sea,—the Elizabeth Islands and Block Island being merely the surface of the moraine where it is partly buried in the ocean; so on across Long Island, Staten Island, and a good part of New Jersey, the moraine is not far above the level of the sea. West of the Delaware the line mounts the summit of the Blue Ridge, 1,500 feet above the sea, and descends in crossing a transverse valley, a few miles to the north, 1,000 feet. It ascends again, in a few more miles, the summit of Pocono Mountain, which forms the watershed between the Delaware and the Lehigh, and is 2,000 feet above the sea. Upon reaching the east branch of the Susquehanna at Beech Haven, it has again descended 1,500 feet, and it keeps on in a nearly uniform course until it mounts the escarpment of the Alleghanies north of Williamsport. From this point on to Salamanca the elevation varies from 2,000 to 2,500 feet. Once across the Alleghanies the line works gradually to a lower level until it reaches the southern part of Ohio, where it is still nearly 1,000 feet above the sea.

These facts by themselves clearly show that the boundary line which we have traced, does not, as Dr. Dawson supposes, mark the shores of an ancient sea, for if that were the case,

there would have been a barrier to limit the sea, and that barrier must have been upon the same general level, which, as we have seen, is not the case.

Nor have there been any physical changes since the glacial period sufficient to produce these diversities of elevation. The Alleghanies were uplifted millions of years before the glacial period. This is evident from the immense amount of erosion which had taken place before the glacial period. Southeastern Ohio and Western Pennsylvania are covered with the strata of the coal measures, some outlying fragments of which are still to be found as far east as the Susquehanna Valley. Now the rivers in all this region flow along the bottoms of deep troughs almost like canons, which in the course of ages have been cut down by water through the parallel strata of sandstone, lime, shale, and coal, which, in alternate layers, built up the great structure of the carboniferous period. The extent and depth of these narrow valleys of erosion are scarcely appreciated. For fifty miles above Lock Haven, in Pennsylvania, the Philadelphia and Erie Railway follows up a narrow winding gorge, in the west branch of the Susquehanna, which is 1,000 feet in depth. Instead of digging for the coal in this region they ascend the summits of the hills. The Allegheny and the Ohio rivers occupy similar troughs, which are from 300 to 500 feet in depth. These are valleys of erosion, and every tributary of these streams occupies a similar trough which it has cut for itself. It is certain that the main lines of drainage upon this continent do not now differ materially from those which have existed from the very earliest time.

I say *materially*, because in minor respects the glaciation of the continent produced many permanent changes in the drainage, and, for a temporary period, changes that were remarkable. But, in the main, the watershed between the St. Lawrence and the Mississippi has been, from the coal period on, a well-defined and permanent feature in the physical geography of the United States. The minor changes in the drainage of this country have been largely due to the work of the glacial period. Everywhere over the glaciated region the till, or ground moraine, has been forced like putty into the gorges formed by the

erosion of pre-glacial streams, so that nothing is more common throughout this region than to find that the old channels have been buried, and the streams forced to flow in new channels of modern date.

c. A third peculiarity in the border of the glaciated region is the character and amount of the accumulations marking it. Along a considerable portion of this boundary line the accumulations of glaciated material are immense. South of New England the boundary is marked by a line of hills from 50 to 250 feet in height, and from two to three miles wide. These hills are composed of loose material, thrown together in irregular hummocks and ridges, with many enclosed depressions to which there are no outlets, and which, from their shape, are called "kettle-holes." Many large boulders, brought from a long distance, are found scattered over these hummocks. There can be no question that this is a terminal moraine, marking the line from east to west, along which the ice-front rested for a considerable period, and where, from century to century, it deposited the burdens of rock and earth which it had picked up in its journey from the north. This was the line of battle between the frosts of the north and the tropical winds of the south. Here, as the sun melted back the ice in summer, the ice deposited its earthy material, and in the winter regained its ground to repeat the process and beat a retreat the following summer, and so on until these immense hills had been deposited. In New England we can often trace the boulders to ledges scores of miles to the north. Across New Jersey these moraine hills continue upon a corresponding scale. West of New Jersey the broken and mountainous character of the country has frequently disguised the facts, so that they are somewhat more difficult of discovery. But even here the genuine features of a terminal moraine reappear so often that there can be no question about the mode of its formation. We may note especially a remarkable development of moraine hills upon the level summit of Pocono Mountain. Here, for many miles, and 2,000 feet above the sea, are almost exactly repeated the features which we have described in Southern New England. One may travel from the southward for a long distance, over

an elevated plain whose only covering of soil is a foot or two of sand and angular fragments arising from the sub-aerial disintegration of the underlying level strata of Pocono sandstone; when suddenly, near Tobyhanna, he intersects the majestic curve of moraine hills just referred to. Down to this limit glaciated stones are piled in every imaginable confusion. Here, in dense forests, are kettle-holes, many of which are still filled with water, which slowly drains away through the loose material near the rim. Here, in the *debris* which goes to form these hills, are granite boulders which must be hundreds of miles away from their native place.

Omitting for the present further reference to Pennsylvania and coming to Ohio, we find in Columbiana county and the eastern part of Stark county, that the accumulation of glacial material along the front of the ice, is somewhat less marked in quantity than farther east, but is the same in quality. The apparent diminution in quantity may arise from its having been spread over a wider base. But, near the western part of Columbiana county, at New Alexandria, two or three miles back from the very extreme limit of glacial signs, the familiar knobs and kettle-holes of the moraine are distinctly marked, and that upon the very height of the land. Wells are here sunk from thirty to fifty feet without passing through the glacial accumulation. A mile or two west of Canton, in Stark county, the accumulations of glaciated material are upon a scale equal to anything in New England. The northern part of Holmes county is covered with till which is everywhere of great depth, and in numerous places near the margin displays, though in a moderate degree, the familiar inequalities of the New England moraine. After the southern deflection in Knox county, the glaciated region is entered near Danville, from the east, on the Columbus, Mt. Vernon & Akron Railroad, through a cut in till a quarter of a mile long, and from thirty to forty feet in depth. At the old village of Danville near by upon a neighboring hill, wells are reported as descending more than a hundred feet without reaching the bottom of the till. Through Licking county, both north and south of Newark, the depth of the glacial envelope is great up to within a short distance of

its eastern edge. At the reservoir in Perry county the distinct features of a moraine come out. The hill upon which Thornville is built is a mass of glaciated material in which wells descend from thirty to fifty feet without striking rock. This is upon the highest land of the vicinity. The reservoir itself seems to be in a great kettle-hole or moraine basin. All through Fairfield county the glacial accumulation is of a great depth down to a very short distance of its margin. But perhaps the most remarkable of all the portions of this line in Ohio is that running from Adelphi, in the northeast corner of Ross county, to the Scioto River. The accumulation at Adelphi is more than two hundred feet, and continues at this height for many miles westward. Riding along upon its uneven summit, one finds the surface strewn with granite boulders, and sees stretching off to the northwest the magnificent and fertile plains of Pickaway county, while close to the south of him, yet marked by a distinct interval, are the cliffs of Waverley sandstone rising two hundred or three hundred feet higher, which here and onward to the south pretty closely approach the boundary of the glaciated region.

Passing over the intervening space, we note that in Boone county, Kentucky, the accumulation of glacial material extends several miles south of the Ohio River, and many feet in depth, and is here at an elevation of more than 500 feet above the river. At an equal elevation similar accumulations appear across the river in Indiana, west of Lawrenceburg,

At every step along the line, as thus traced through Ohio, granitic boulders of every size and shape and complexion are to be found. The two largest measured were one in Columbiana county, near Hanover town, which is thirteen feet long by eleven feet wide, and which stands eight feet out of the ground; and another near Lancaster, in Fairfield county, which is eighteen feet long, twelve feet wide, and stands six feet out of ground. These are granite boulders, whose native ledges are in Canada, far to the north of Lake Erie. Boulders from three feet to five feet in diameter are too numerous to mention.

SOME GENERAL CONCLUSIONS.

Several interesting subsidiary considerations are connected with this subject:

FIRST. *The Glacial Period and the Interests of Agriculture and Health.*—In this State, and probably further west, the prairie region is seen to have been a product of the glacial period. It was the moving ice of that period which wore down the prominences and filled up the depressions to produce the dead level or gently rolling surface of all this prairie region. The action of running streams produces fertile intervalles in narrow valleys, but the sheet of ice that pressed over our continent ground up the rocks, and spread the *detritus* over the whole surface. In the level regions of the West the soil is nearly everywhere fertile. A noticeable quality in the soil of the glaciated region is the mixture of the elements composing it. All the rocks to the north have contributed to its composition. In the soil of Lorain county, for example, there are found the pulverized fragments of various granites from Canada, of the limestones of the Sandusky group, mingled with those of the neighboring shales and sandstones. All these elements have been kneaded together into one homogeneous mass by the moving ice, as the housewife kneads her flour and yeast together.

The legislators of the State do not yet fully appreciate the economical and sanitary bearings of glacial investigations. The ice movement of the glacial period pretty much made the inhabitable portions of this State. It determined the character of the soil, the contour of the country, the minor lines of drainage, and thus in a thousand ways had to do with the pleasure, the health, and the prosperity of the present population. As, a few weeks ago, I marked off the glacial limits on a map of this State, the Secretary of the Board of Agriculture at once remarked to me that that was the southern boundary of the great wheat-producing portion of the State, and expressed an earnest desire that Ohio might secure as thorough an examination of the glacial phenomena within its bounds as has been done by New Jersey. Certainly if one is to buy a farm in Ohio he should pray that it be either in a river valley or north of the terminal moraine. Of course this is to be taken as a

general statement, to which there are exceptions; but even then it will be found that the exception proves the rule.

SECOND. *Relation to Archaeology.*—Dr. C. C. Abbott reports that he has found palæolithic implements (one of which is shown in the accompanying cut, together with one from France for comparison) stratified with the gravel forming the terrace of the Delaware River, at Trenton, N. J. I have repeatedly visited that place with Dr. Abbott, and in company



PLATE VI. The palæolith here shown is natural size, and is No. 3034 of the Mortillet collection from Abbeville, France. The geological conditions under which this was found are very similar to those of the palæolith from Trenton, N. J.



PLATE VII. This palaeolith is shortened one inch in the cut, and is proportionally narrow, the original being 5-6-8 inches long and 3-1-8 wide. This is No. 19723 in Dr. Abbott's collection from Trenton, N. J. The Mortillet and Dr. Abbott's collections are both in the Archæological Museum, in Cambridge, Mass., where these specimens can at any time be seen. No. 19723 is specially interesting, because Professor Putnam took it with his own hands out of Trenton gravel from behind a small boulder which was firmly embedded four feet below the surface of the soil. (See *Proceedings of Boston Society of Natural History*, Vol. XXI., p. 149.) For the geological condition, see Plate II., p. 204; for a more detailed account, see "Studies in Science and Religion," Chapter VI.

with Professor Dawkins of England and Professor H. W. Haynes of Boston,—two of the highest authorities upon palæolithic implements that can be found in the world,—and they testify that the implements found by Dr. Abbott, both in their form and in the situations in which they occur, closely correspond to those which have been so carefully studied in northern France and southern England.

An examination of the terraces along the Delaware at once brings these implements into definite relation to the glacial period. The gravel in which they are found is glacial gravel deposited upon the banks of the Delaware when, during the last stages of the glacial period, the river was swollen with vast floods of water from the melting ice. Man was on this continent at that period when the climate and ice of Greenland extended to the mouth of New York harbor. The probability is that if he was in New Jersey at that time he was also upon the banks of the Ohio, and the extensive terrace and gravel deposits in the southern part of our State should be closely scanned by archæologists. When observers become familiar with the rude form of these palæolithic implements they will doubtless find them in abundance. But whether we find them or not in this State, if you admit, as I am compelled to do, the genuineness of those found by Dr. Abbott, our investigations into the glacial phenomena of Ohio must have an important archæological significance, for they bear upon the question of the chronology of the glacial period, and so upon that of man's appearance in New Jersey.

To appreciate the bearing of glacial studies upon this question we must return to study the old water courses which existed in glacial times. As you can see, a special interest attaches to those rivers which rise in the glaciated region and in the lower part of their course flow through the unglaciated. Man lived first below the glacial limit, and fished upon the banks of the streams which were periodically gorged with the spring freshets of the glacial period, and during those floods lost his spear-heads, his hammers, his axes and scrapers, where they became mingled with the gravel brought down from up the stream. The Delaware River happens to be the first stream west of the

Atlantic whose source is in the glaciated region and whose mouth is in the unglaciated. But, in following the terminal moraine westward, we are continually crossing streams which are similarly situated; such are, in Pennsylvania, the Lehigh, the east branch of the Susquehanna, the various creeks which empty into the west branch of the Susquehanna, and those which empty into the Allegheny River; all of which, I can testify from personal inspection, substantially repeat in their terrace formations the phenomena along the Delaware River, where it passes from the glaciated to the unglaciated region. Where these streams emerge from the glacial region there are uniformly immense deposits of granitic pebbles and coarse gravel, and, for long distances below, terraces of finer gravel far above the present high-water mark.

Ohio abounds in streams similarly situated, among which may be mentioned the forks of the Beaver and Sandy Creeks, in Columbiana county; the Nimishillin, the Tuscarawas, and Sugar Creek, in Stark county; the Killbuck and Mohican, in Holmes county; the Licking, in Licking county; Jonathan Creek, in Perry county; the Hocking River and Muddy Prairie Run, in Fairfield county; and Salt Creek, the Scioto, and the forks of Paint Creek, in Ross county. To this list may also be added the Ohio itself.

The Ohio is in every respect unique in its relations to the glacial period. Through the whole of its course from Pittsburgh to Cairo, it is, roughly speaking, parallel with the terminal moraine, and all along its course has received from the north the contributions of water and ice and gravel which poured down from the decaying ice-front but a short distance away. And now the discovery of glacial deposits in Campbell and Boone counties, Kentucky, adds another exceedingly interesting feature to the problem. Here, as we have seen, the ice actually crossed and projected several miles south of the Ohio River. From the elevation at which these accumulations occur it is certain that the ice-barrier at Cincinnati must have been at least six hundred feet. This would set the water of the Ohio beyond Pittsburgh, far up into the Allegheny and Monongahela rivers, submerging Pittsburgh itself to a depth of about

three hundred feet. This discovery helps to explain some facts observed a year ago in our survey of the moraine in Pennsylvania. We shall expect to find this theory verified by a variety of observations upon the upper course of the Ohio and its tributaries. We shall expect to find also, in Kentucky, some indications of the outlet of this temporary glacial lake.

It is interesting to reproduce by the imagination the form and appearance of this lake. The barrier probably was not high enough to submerge all the highlands of southeastern Ohio, or of northern Kentucky and of West Virginia; but long bays must have stretched up on the north through all the valleys to the ice-front. Thus the glacier in southeastern Ohio would for awhile seem to terminate in an archipelago. How long this condition of things existed it is impossible to tell with certainty, but from the limited amount of the deposit south of the Ohio River a relatively brief period is indicated. The Ohio Valley, both before and after the formation of this ice-barrier, must have presented inviting haunts for palæolithic man. It is of the utmost importance to archæology that the gravels of this valley should be carefully scanned. Probably there is nowhere in the world so inviting a field for such investigation as the banks of the Ohio and its tributaries.

THIRD. *Date of the Glacial Period.*—I have time to say but a word upon the field which is opened before us in this State for making calculations as to the date of the close of the glacial epoch. It is not well for the geologist to abandon his own chronological data for the confessedly uncertain speculations of astronomers upon this subject. Geologists have scarcely begun the systematic study of the evidences bearing upon the date of the glacial period. The evidences are three-fold: First, the amount of the glacial deposit; second, the extent of erosion since the glacial epoch; third, the extent to which glacial depressions have been filled with sediment.

The opportunities to estimate the extent of erosion since the glacial epoch are superabundant in Ohio. Each of the larger streams emptying into the Ohio River and into Lake Erie, and every tributary of those streams, presents a field by itself. In

countless cases it is within our power to estimate with reasonable accuracy the number of cubic yards of material which the streams in the glaciated regions have removed from the till through which they flow. This would give us the *dividend*. It is by no means improbable that there are also many streams so nearly in their primitive condition that the rate of removal can be approximately estimated. This would give us the *divisor*. The *quotient* would give us the chronology of the close of the glacial period. The other hopeful field for chronological investigation in this State is presented in the numerous lakes which exist over the glaciated surface, and which, in most cases, owe their origin to the irregular deposition of till. It is not beyond hope that some of these may yield us the secret of their age. It may be possible to ascertain how deep a layer of sediment and peat has accumulated, and we may discover more specific facts concerning the rate of such accumulation. For a fuller discussion, see Chapter VI. in my "Studies in Science and Religion," Andover, W. F. Draper, 1882.

FOURTH. *Centers of Glacial Dispersion.*—Another topic to which we should give more attention relates to glacial movement, and to the centers from which the ice was dispersed. Ice, it should be remembered, behaves not like a solid but like a semi-fluid. If an oblong block of ice be suspended upon the ends it will gradually sag in the middle. If a strong hollow sphere be filled with water, and a good-sized orifice be left through which the ice may escape, and the whole be subjected to intense cold, the ice will project through the hole for a considerable distance. As a matter of fact, ice flows like cold molasses or half-hardened lava.

It is not necessary (as some might suppose) to have a steep declivity in order to secure glacial motion. Ice can move wherever water would run. In our conceptions of glacial movement we are in danger of having our ideas cramped by the contemplation of Alpine glaciers. The demands made upon our imagination by the glacial phenomena of North America are almost staggering to reason. We are called upon to believe that along a line thousands of miles in extent the ice-front of the great glacier rested upon land which is no-

where much lower—and in many places is actually higher—than the region from which it was dispersed. Boulders, in many cases, have been raised to a higher level than their native ledges.

Upon reflection, however, this is not so paradoxical as at a first glance it seems. It should be remembered that glacial ice is formed, not by the freezing of water upon lakes and oceans, but by the accumulation of snow, which, under its own pressure, becomes converted into ice. If, now, over an extensive level surface there should be precipitated annually six feet more of snow than melted, six thousand feet of ice would accumulate after a thousand years. It is thus easy to see that after a time the ice might form a mountain plateau by itself, and, owing to its semi-fluid character, it would gradually move away along whatever lines presented the least resistance. Such accumulations about the north pole would everywhere move to the south, and so we could get this southerly motion from the mere accumulation of ice about the pole, without supposing any change of level.

It is easy, also, to see that wherever—from climatic causes over any particular portion of this field—there should be an excessive accumulation of snow, that area would form a sub-center by itself, and project the ice-front in a loop south of the main line. The existence of such sub-centers I suppose to be, in part, the explanation of the various loops and irregular flexures which mark the glacial boundary in North America.

Nor is it difficult to conceive how boulders are raised in the ice to a higher than their original level. Indeed, I think I can conceive that fragments of rock can be picked up from beneath the glacier, and after movement over sufficient distance appear upon its surface; and I can easily believe that many of the well-known glaciated boulders scattered over the surface of Ohio have been repeatedly transferred from beneath the ice to its surface, and thence projected to the foot of the advancing ice-front, and afterwards re-elevated and projected again. This might be brought about as follows:

It is well known that the upper strata of glacial ice move faster than the lower, owing to the effect of friction in retarding the movement at the bottom. The result of this is that the upper side of the boulder which is imbedded in the ice is constantly subjected to a greater degree of onward pressure than the lower side. The effect of this must be to give an upward as well as an onward motion to the boulder in the ice. The course of such a boulder would be up a very gently inclined plane, the slower moving strata beneath it forming the incline, and the more rapidly moving upper strata being the force to push it along. Once upon the surface, if the motion were to continue long enough and the front were not too far away, the boulder might be transferred to the front and deposited before the moving mass; and if the glacier were still advancing, it would stand a chance to be covered again with ice, and to be re-incorporated in the moving mass to repeat another cycle.

CONCLUSION.

The glacial boundary line marked upon the map of Ohio is easily drawn when you know where to draw; but in reality it is about two hundred and fifty miles in length, and its determination could be secured only by exploring a belt about ten miles wide, and by travelling in the field a distance of more than one thousand miles. I have now zigzagged this line for the larger part of the distance from the end of Cape Cod to Illinois, and you will pardon me for entertaining some enthusiasm upon the subject, and for having my imagination pretty well filled with the theme. The ice period of North America seems to me no longer a myth, but a reality. With my mind's eye I have seen it; I have walked along its front; I have beheld its glassy surface as it overlapped the mountain ranges of Pennsylvania, walled up its ancient river channels, filled up the depths of Lake Erie, and spread itself over the fairest fields of Ohio; and again I have seen it in its retreat, when its thickness was diminished, when its decaying southern border was obscured by the accumulations of materials which now form the moraine. I have seen it when the great streams

of water from its melting surface had worn a series of parallel gorges in it along the line of the present water courses. In imagination I have witnessed the enormous annual rise of the streams during the declining years of the glacial period. I have seen the hardy palæolithic race who fished in these streams and hunted upon their banks, and were hastily driven from their homes by the rise of floods whose volume we can scarcely comprehend. To the mental vision of him who goes over this field all these things become realities. He has seen their signs: he has interpreted their handwriting.

I commend the study to the professional and business men who need to seek recreation and health in outdoor pursuits. Now that the buffalo is becoming scarce, and trout fishing unremunerative, we present to you for your vacation work the enticing sport of hunting for the terminal limits of the great American ice sheet, and for its imbedded marks of palæolithic man.



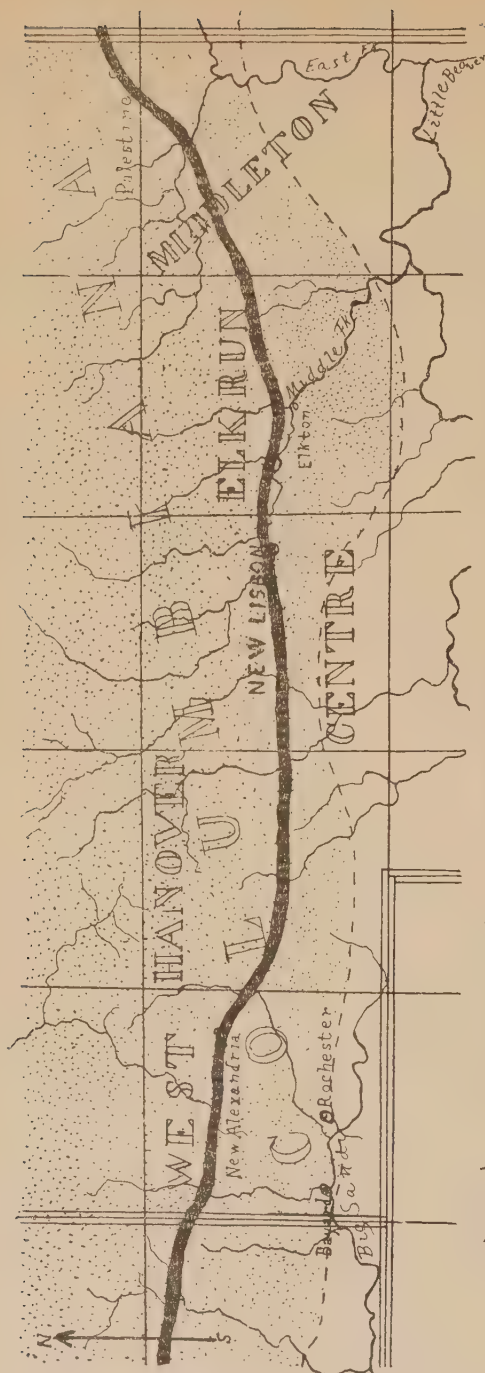


PLATE VIII.
Six miles to an inch.

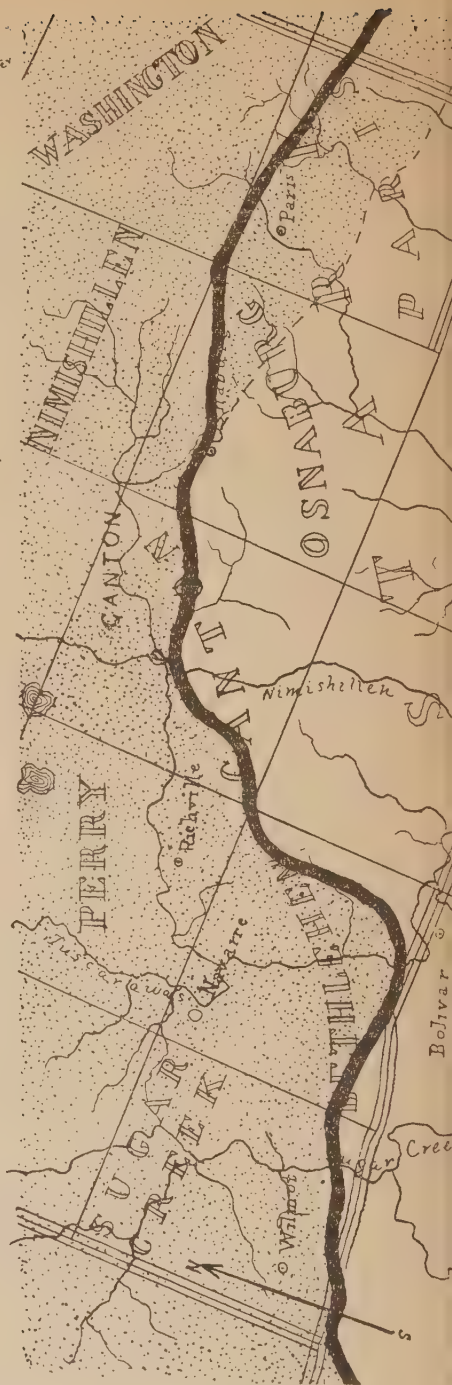


PLATE IX.

DETAILED REPORT
OF
INVESTIGATIONS ALONG THE BOUNDARY
OF
THE GLACIATED AREA IN OHIO AND INDIANA,
CONDUCTED BY
PROF. G. FREDERICK WRIGHT, OF OBERLIN, OHIO,
IN THE SUMMER OF 1882.

COLUMBIANA COUNTY.

The boundary line of the glaciated region as it enters Ohio from Pennsylvania, is not so distinctly marked by large accumulations of till as in many other places; so that it might create misapprehension to speak of a "terminal moraine" in Columbiana county. Still the boundary is well defined, and on penetrating the glaciated region a few miles, the accumulation of till is extensive. As we approached the Ohio line through the western counties of Pennsylvania, it was observed that what we have called "the fringe" became more extensive than in the eastern part of the State; that is, scattered granitic boulders and occasional accumulations of till are found in some places five or six miles south of the line bounding the continuous accumulation of till which envelops the larger part of the glaciated region. This peculiarity continues through Columbiana county, from east to west, and as far as Canton in Stark county.

For example: The accumulations of till worthy of being called a "terminal moraine," and of being reckoned as a continuation of that which marks the boundary of the glaciated region in New Jersey and Pennsylvania, enters Ohio at Palestine, Columbiana county, near the boundary of Unity and Middleton townships. The wagon road from Darlington to Palestine enters a great accumulation of till, near John Harts-horn's, about one-half mile south of the Pittsburgh, Ft. Wayne and Chicago R. R., and one mile east of Palestine. Here,

upon the land of the State Line Coal Works, upon a hill sloping to the north, is a striking collection of granitic boulders, one of which measures 9x6x4 feet. In the valley to the north, through which the railroad runs, the accumulations of drift show the modifying action of the glacial currents which characterized the closing stages of the glacial period. The broken ridges and knobs of gravel, alternating with shallow kettle-holes, remind one of the kames in New England. Palestine is built upon such a formation. A large granitic boulder was here observed, in a freshly dug grave, five feet below the surface. A well was reported as penetrating till for fifty feet without striking the bed rock. Three-quarters of a mile southwest from Palestine, a cut shows twenty feet of till; but boulders of granite and scratched stones with an occasional slight deposit of till, were found several miles further south, on the summits of the hills. We walked from Smith's Ferry, on the Ohio River, northward over the hills, to a point on the State line east of Achor, in Middleton township, without finding any signs of glaciation. Here granitic boulders began to appear near Danison's coal bank. On the summit of the hill one-half mile west of Achor, and about 200 feet higher than the bed of Little Beaver creek, is a granitic boulder 5x3x3 feet. From this point northward to the moraine at Palestine, these scattered but unmistakable evidences of the presence of the glacier ice are found upon all the hill-tops.

After this description of the fringe, and its relation to the moraine, we may pass more rapidly over the subject. The boundary of the fringe runs south-westward from Achor to Clarkson post office, thence to the southeastern corner of Elk Run township; thence westward along the southern line of this township to the southeastern corner of Centre township; thence it bears northerly, striking the line of Hanover township two miles northeast of Dungannon, thence westerly and bearing a little south through Hanover township, passing one-half mile south of Hanoverton Post Office, continuing west to Bayard. At Rochester there is an extensive kame-like deposit filling the valley, which is here about one-half mile wide, in which are numerous granitic pebbles from three to six inches

in diameter. One of these gravel ridges, running north by south, measured a little over 30 feet in height, with a slope of 20° . This cluster of kames is evidently due to the glacial floods pouring down the two branches of Big Sandy creek, which here unite. The accumulations of gravel in the valley of Big Sandy creek gradually diminish in amount and in coarseness from here on to Minerva, in Stark county. The ice all along here filled the valley and rose to the summit of the hills on the south. One boulder was found in the north-western corner of Augusta township, Carroll county, but an extensive *detour* of several miles to the south failed to discover any other signs of glaciation in that county. On returning to Bayard, till was found one-half mile southwest, rising upon the hills south of the valley to a height of 50 or 60 feet. One-half mile northwest of Bayard is a terrace 31 feet above the present flood-plain, enclosing a shallow, but extensive, kettle-hole between it and the hills to the north.

Retracing now our steps we find that from three to five miles north of the edge of this fringe there is a marked increase in the accumulation of till showing itself at East Palestine and near East Carmel Post Office. Thence across Elk Run township through Elkton to New Lisbon. The northeast part of Centre township is completely enveloped with till of an unknown depth. Three miles from New Lisbon and a quarter of a mile west, on the road to Teegarden, is a boulder of gneiss $8\frac{1}{2} \times 6\frac{1}{2}$ feet, 4 feet out of ground. At and below New Lisbon, in the valley of the Middle Fork of Beaver, are the extensive accumulations of pebbles and coarse gravel which everywhere mark the streams as they issue from the line marking the terminal moraine. The terrace at New Lisbon shows no distinct stratification, and contains numerous pebbles from 10 to 15 inches in diameter, and at the railroad station is 36 feet above the river. Upon the north side, this extends for one mile down the stream. Still further down, similar terraces appear at intervals nearly to Elkton. The gravel in all these terraces is mined for kidney ore.

From New Lisbon west, the moraine runs through the northern part of Sections 23, 22, 21, 20 and 19 in Centre township.

In Hanover township it passes directly west, through the northern part of Sections 24, 23, 22, 21, 20 and 19. Two and a half miles northeast of Hanoverton, on the farm of Mr. Kinnely, the moraine is well developed, displaying its characteristic hummocks and kettle-holes upon the summit of the country. Large boulders are here very numerous, many from 3 to 5 feet in diameter. A mile or two farther north, near the state road, on the farm of Francis Blythe, is a granitic boulder 13x11 feet, 8 feet out of ground. Till is here certainly 16 feet deep, but how much more we could not ascertain.

Through West township the moraine bears slightly north, passing through the village of New Alexandria, which is situated upon a height of land, and surrounded by hummocks and kettle-holes of moderate size. Wells are reported 27 feet and 50 feet without striking rock. This continues through New Chambersburg, where wells were reported on the farm of Henry Bowers as going 27 feet without striking rock, the lower 6 feet in gravel and sand.

STARK COUNTY.

The boundary line of the fringe in Stark county runs from Bayard northwest through Paris and Osnaburg townships, passing through the villages of Robertsville and Osnaburg. Boulders of large size are found a little back from this line in the eastern part of Paris township, some of them measuring between 7 and 8 feet. Two and a half miles southeast of Paris post office the last indications of ice-action are a few boulders in Section 15, one measuring 4x3x2 feet. West of Osnaburg the fringe becomes merged with the main accumulation.

The moraine proper passes through the northern sections of Paris and Osnaburg townships. One mile east of Paris post-office granitic boulders are numerous, and cuts in the till show it to be at least 10 feet deep upon the hills, and probably 20 feet. Three-quarters of a mile southwest of Paris, in the valley of Black Creek, the terrace of water-worn material is 15 feet above the stream, which is here small. The terraces are partially ridged, and contain shallow kettle-holes. On the farm of D. P. Sell, Section 6 of Paris township, wells are reported

30 feet deep, the first 8 feet being yellow till, the remaining 22 feet blue till. Another, 20 feet deep, ended in quicksand. This is on the high lands. Till completely envelops the southeastern corner of Nimishillin and the northeastern of Osnaburg townships. Kettle-holes are also apparent on the farm of H. Miller. In Section 2, Osnaburg township, on the farm of G. Hennigs, wells are reported 18, 20 and 26 feet, all in till. On a little higher land, in the southwest corner of Section 2, J. Anthony reported a well 14 feet through till. Till of unknown depth completely envelops the region for three miles south of Louisville post office. There are kame-like ridges in Section, 3 Osnaburg township, in a shallow valley along a branch of East Nimishillin Creek. The whole appearance of the country is as if filled up with till. Till continues on the road from Louisville to Osnaburg, where it suddenly ceases, at the corner of the diagonal road running to Robertsville. From Osnaburg southwest, for three miles, thence northwest three miles towards Canton, not a pebble or boulder was discovered. Much of the way the road is on high land, deep valleys opening southward-it being on the watershed between Nimishillin and Big Sandy. On crossing a small branch of the Nimishillin two and a half miles southeast of Canton, in the southwestern corner of Section 14 in Canton township, we struck suddenly into till on the north bank. From this point to Canton City till is continuous and granitic boulders are abundant. The depth of the till is unknown, but at various places cuts show it to be at least several feet deep. Sections 11 and 12, north of the Osnaburg road, are completely enveloped with till. A few rods northeast of the cemetery, about one mile east of Canton, are shallow kettle-holes in till. Upon the east branch of the Nimishillin the terrace facing the stream and a short distance back is 41 feet above the flood-plain. This contains many pebbles 16 inches and more in diameter. All are well rounded, and many are of local material. The cemetery, 20 rods farther east, is 16 feet higher, and is upon till. On the west side of the west branch of the Nimishillin the terrace rises in successive stages more than 80 feet, and its surface is very uneven. A mile and a half south of the city, below the junction of the two branches, there are

two well-marked terraces, the first of which is much the broader, and is 38 feet above the bed of the stream. The upper terrace, on the east side, is 36 feet higher, or 74 feet above the stream. The pebbles in the upper terrace were a mixture of granite and local rock, some of them a foot or more in diameter. One granitic pebble was more than 2 feet in diameter. The terrace on the west bank, near the Starr Mills, was by measurement 5 feet higher than that on the east.

A remarkable cluster of kame-like ridges covers the north-western portion of Canton township and the northeastern of Perry, extending an unknown distance to the north. Meyer's Lake and Sippo Lake are enormous kettle-holes, and the whole region has much the appearance of Plymouth township in Massachusetts. Upon the south this kame-like belt is called Buck Ridge, and comes to a sudden termination near the crossing of the Fort Wayne and Chicago Railroad, two miles southwest of Canton City. Here an excellent section is made by the railroad. The kame rises 85 feet above the railroad, is coarsely stratified in places, contains many granitic pebbles (one of which measured 55x46x18 inches), and was $21\frac{1}{2}$ feet higher than the railroad. There were large spaces in which no stratification appeared. There were pebbles upon the summit from 2 to 5 inches in diameter. The section exposed shows a base of 570 feet, with an altitude of 85 feet. The slope upon the east side varies from 18° to 25° ; on the west side it is a little more gentle. (See cut in Geological Survey Ohio, vol. 2, p. 44.) An extensive sandy plain, full of gentle swells and ridges, stretches to the westward, while the space towards Canton is occupied by the more nearly level terrace. About 150 yards north of this section is a dry kettle-hole 25 feet deep, containing a granitic boulder 51x25x31 inches. Another dry kettle-hole near by is about 300 feet long, 200 feet wide, and 40 feet deep, with sides sloping inward 24° . The rims of these kettle-holes are at the summit of the kame.

From my experience elsewhere, I should expect to be able to trace a series of kames northward from this point, and find it enclosing the lakes in the southern part of Summit county, and particularly abundant south of Akron.

From Canton westward the fringe pretty much disappears, and the moraine bears rapidly southward, running across the southeastern corner of Perry township, and continuing in a south-southwestern course to the southern part of Bethlehem township, crossing the Tuscarawas River about two miles above Bolivar; thence it bears more westward, crossing the southeastern portion of Sugar Creek township, and the northwestern corner of Wayne township in Tuscarawas county, entering Holmes county east of Weinsburg.

It is difficult to exaggerate the sharpness of this portion of the boundary line. Retracing our course, our notes show that the line bounding the till passes through the middle of Section 29 Canton township, where it crosses a small stream running to the north. This, like many other similar cases, showed signs of having been dammed up, thus producing a small temporary glacial lake. To the north and west the till is continuous, and probably of great depth; to the east it suddenly disappears, half way up a low hill. From Richville to the southeastern corner of Perry township till and boulders are continuous, and the deposit apparently of great depth. One of the boulders a short distance beyond the till measured $6 \times 4\frac{1}{2}$ feet. A detour through Section 6, Pike township, and Section 32, Canton township, demonstrated a total absence of glacial signs in that region. The whole country to the southeast was broken and hilly, in striking contrast to that in the opposite direction, which seems to have been leveled up by glacial material. Upon the hills in Section 1, Bethlehem township, cuts in the till 6 feet in depth disclose large granitic boulders lying still deeper. The road running south, between Sections 11 and 12, and 13 and 14, is upon the very edge of the glaciated region. Detours of a few rods to the east lead into a region in which there is only rock in place and the soil formed by its disintegration. Southwestward from this point to the river, the boundary is near an unfrequented road passing one-half mile north of the first Moravian settlement in this region.

At the upper end of the great ox-bow in the Tuscarawas River upon which Bolivar is built, but on the north side of the river, is an immense kame-like accumulation, containing boulders

from $2\frac{1}{2}$ to 3 feet in diameter. The terrace is here 36 feet above the river, and the kame-like accumulation is 118 feet higher. The space included in the ox-bow is occupied by a gravel deposit whose surface is 51 feet above the river. From this point down, the river occupies a narrower valley, with diminishing terraces. Five miles below, at Zoar, wells in this terrace 30 feet deep do not go through the gravel. Above the ox-bow, and on the west side of the river—opposite the kame-like deposit just described—the terrace is 61 feet, which continues up the river a mile or more without change.

Going west along a road near the county line in Bethlehem, a little till appeared when the higher land was reached, but on ascending the hills to the left (south) it disappeared, and is wholly absent in the extreme southwestern corner of Bethlehem township. But the hills in Section 30, immediately to the north, are covered with till containing large granitic boulders, some of which are between 3 and 4 feet in diameter. Till is continuous, and of unknown depth, all the rest of the way to Navarre, displaying to some extent the familiar kettle-holes and knolls of the moraine belt. The small streams emptying north also display the well-known signs of temporary ice-dams. One of the numerous boulders of red granite over this area was between 200 and 300 feet above the Tuscarawas River, and measured 7x5 feet, 3 feet out of ground.

The characteristics of the moraine just described continue through the southern portion of Sugar Creek township, crossing Sugar Creek below Beech City. One and a half miles below Beech City, towards Deardoff's Mills, the accumulations of gravel in the valley are immense. The valley is here about one mile wide. The gravel is thrown up into hummocks and ridges from 20 to 30 feet above the general level, enclosing many kettle-holes. The country from this point to Wilmot, and from Wilmot south to the county line, is completely enveloped in till. One boulder measured 7x6 feet, $2\frac{1}{2}$ feet out of ground. But on the road from Deardoff's Mills, across the northern part of Wayne township in Tuscarawas county, toward Weinsburg in Holmes county, no till or boulders appeared for several miles. The road leads over the summit of the land, and displays, to

good effect on either side, the contrasts between the glaciated and unglaciated region. One mile and a half east of the Holmes county line granitic boulders begin to appear, and accompanied after a little with till, continue to increase to Weinsburg. This east and west road enters the moraine at an acute angle, the direction of the moraine being here west-southwest. The northeast portion of Paint township, in Holmes county, is covered with till to an unknown, but evidently to a great depth.

HOLMES COUNTY.

The glacial boundary in Holmes county is very sharply defined, dividing the county into two nearly equal portions. It enters the county on the east, in Paint township, near the corner of Stark and Tuscarawas counties, and passes diagonally to the northeast corner of Berlin township, where it turns more nearly west, passing through Hardy township, crossing the Killbuck below Millersburg; thence, bearing slightly to the north, it passes through the centre of Monroe and the northern part of Knox township, to the eastern side of Hanover township in Ashland county. Through all this distance the contrasts between the regions north and south of this line are very marked.

In Paint township there is but little till south of the diagonal road leading from Wilmot through Weinsburg to Berlin. Driving one-quarter of a mile south of Weinsburg, till suddenly disappears. There is a noteworthy collection of granitic boulders a few rods southeast of the village, at the crossing of the road from Slatersville. South of this there is no till. Occasional boulders were reported, but none were seen by us in a drive of half a mile. To the north and east of Weinsburg the deposit of till is continuous, and evidently of great depth. Weinsburg is on the watershed between Sugar Creek and Indian Trail Creek, and according to our barometer was 600 feet above the valley of the Killbuck at Millersburg. The southwestern part of Paint and the southeastern of Salt Creek townships are likewise covered with till, which is evidently very deep. A granitic boulder on the road between Weinsburg and Mount Hope measured 7x6 feet, 3 feet out of ground.

BERLIN TOWNSHIP.

A detour of several miles through the southern portion of this township disclosed no sign of glaciation, except in the valley of Dowdy Creek. In this valley there are extensive terraces down as far as within one mile of the southern boundary. At that point the terrace is 50 feet above the stream and about 150 yards wide, and contains some scratched pebbles. The boundary of the till runs between Sections 13 and 8, and crosses the western boundary of the township one-half mile south of the road running between Berlin and Millersburg. The elevation here is 475 feet (B) above the Killbuck. Granitic boulders are abundant all along this road. At Berlin post office it is 600 feet (B). On driving north from Berlin post office we strike immediately into till, which seems to be very deep. Near the corner of the road turning east one-quarter of a mile north, in Section 6, are extensive kame-like accumulations containing numerous boulders, and enclosing a large kettle-hole. Till is continuous northward.

HARDY TOWNSHIP.

On the road from Millersburg to Berlin till is found on the tops of the hills all along to the township line. Going east from Millersburg the first hill is 250 feet above the railroad, the second 350 feet, thence rising at the town line to 475 feet. The depth of the till is at least several feet. In Section 14 a boulder measured 7x5 feet, 3 feet out of ground. The most southerly deposit of till on the east side of the Killbuck is where the north branch of Sandy Run touches Section 16, two miles and a half southeast of Millersburg. Three-quarters of a mile northeast of this point a small accumulation of till and boulders occur, at a height of 375 feet above the run; east and south the country is entirely free from it.

The terraces upon the Killbuck are extensive, both above and below the glacial limit. One mile and a half below Millersburg on the west side, on the farm of A. Uhl, is a terrace about a quarter of a mile wide, containing kame-like ridges and knolls, the surface of which is 102 feet above the floodplain. This gradually rises until it is merged in the till of



PLATE X.



PLATE XI.

the hills beyond. Two miles further south, in the northwest corner of Mechanic township, near Stuart's Mills, the terrace is composed of finer material, and is level topped and gradually descends towards the south, being here but 71 feet above the flood-plain. Still further below the glacial limit at Oxford is a terrace on the east side of the creek, extending across the open ends of the ox-bow which the stream here forms. The intervalle is here about one-third of a mile wide, and 25 feet above low-water mark. The terrace is 76 feet higher. On the west side of the creek, between Shimplin's Run and Black Creek, and one-quarter mile west of the Killbuck, are terraces of fine material containing some granitic gravel, which are 61 feet above the flood-plain.

Driving up from Millersburg, on the west side of the Killbuck, there are no terraces for the first mile. The valley is about one-half mile wide. But just above where a small stream comes in from the west is a kame-like accumulation of coarse material, 50 feet in height, extending about one-eighth of a mile. On the north side of this small stream the material is finer, and the surface much more uneven, extending to the road running over the hills to Holmesville.

Near Holmesville—five miles above Millersburg—Paint, Killbuck, and Martin's Creek come together nearly at right angles. About their junction there is an extensive intervalle not far from two miles in diameter. The village is built upon a terrace about 25 feet above the intervalle. Between the Killbuck and Martin's Creek, which comes in from the east, there is a kame-like accumulation of rather fine material (the pebbles being ordinarily not more than three inches in diameter) extending about one-eighth of a mile N. W. by S. E. The surface is very much broken, displaying many kettle-holes. A railroad cutting through it shows some scratched stones in the material, and a depth of 61 feet at the railroad; but it rises about 40 feet higher to the north. From this point to Millersburg, on the east side, there are no terraces, the intervalle being about one-sixth of a mile wide. One-half a mile north of Millersburg, as the road rises over the hill, a fresh cut in the till of 20 feet disclosed no bottom to it.

On the west side of the Killbuck, in Hardy township, till ceases, two miles and a-half southwest of Millersburg, on the farm of William Lisle. There is here a small stream, and the till appears upon the north side of the stream, but not upon the south. The general elevation of the country (which is much broken) is 350 feet above the Killbuck. Southeast, for two miles, till is totally absent, while to the north it is abundant, and boulders are numerous. It continues west to the works of the Hardy Coal Company, from which place to Oxford no till appears.

MONROE TOWNSHIP.

From Oxford we drove in a northwest direction up a small stream which rises in the centre of Monroe township. No boulders or till appeared below Centreville; but there were terraces of fine material containing some granitic pebbles, and diminishing in height as we ascended the stream. North from Centreville granitic boulders began to appear, and were frequent all along up the valley to the watershed, where, near W. S. Carn's, a large deposit of till appeared, enveloping everything and forming large dome-shaped hills. Cuts from 10 to 15 feet disclose no rocks. The road is 300 feet (B) above the Killbuck, but hills covered with till are about 150 feet higher.

Oak Grove Nursery, a short distance to the west, is 475 (B) above the Killbuck. One-quarter of a mile farther west, on lower ground, the deposit of till and boulders is very marked: one of granite measured $10\frac{1}{2} \times 6\frac{1}{2}$ feet, $3\frac{1}{2}$ feet out of the ground. Elevation 430 feet (B). Till is continuous one mile west, and south to the farm of R. Martin. For the next mile and a half there were occasional boulders, but no till. On the next road west, struck suddenly into till by a school-house, whose elevation is 610 (B) above the Killbuck. Beyond this there were occasional boulders to the road near the western line of the township, leading to Napoleon. Some boulders were seen half a mile farther south. This is about five miles northeast of Napoleon, which is situated in the valley of Black Creek, which is about one-eighth of a mile wide, and

from 400 feet to 500 feet below the general level. A striking feature along this creek, and especially in the vicinity of Napoleon, is the great blocks of sandstone, formerly occupying the summits of the hills, which have been broken off, and have gradually crept down towards the bottom as the underlying shale and talus have been removed. These blocks are sometimes as large as a house, and are in all stages of advancement in their progress towards the valley. They resemble in most respects what is to be seen in the valley of the Alleghany south of Salamanca, and in the neighborhood of Rock City. Instead of being due, as some have supposed, to glacial action, these phenomena are pretty certain evidence of the absence of any glacial movement, and exist either altogether south of the line of glaciation, or, as here and at Rock City, on the very margin, where the ice-movement ceased, and where glacial abrasion was reduced to zero.

KNOX TOWNSHIP.

From Napoleon we followed up the narrow valley of Black Creek on the road to Nashville. The valley continues to be about one-eighth of a mile wide, and for five miles is remarkable both for the abundance of the sandstone blocks referred to above, which are creeping down the sides, and for the absence of granitic boulders. Upon reaching the farm of A. Cline, a little south of the watershed, till appeared in great quantities. This is 375 feet (B) above Napoleon. From here to Nashville till is continuous for $2\frac{1}{2}$ miles, as also southwest of Nashville to the hill south of the farm of S. H. Vance. Boulders continued to the cross-roads south of the house of A. Bell, where all signs of glaciation had ceased. West of this there are no signs of glaciation as far as the next cross-roads. Elevation 450 feet (B) above Napoleon. Turning north, one mile brought us into a kame-like deposit in a shallow valley by the cross-road, near G. Uhlman's, one mile south of Washington township, and three miles east of Hanover township in Ashland county. This kame is about 25 feet high, and its course is nearly parallel with that of the shallow valley in which it is situated, which drains into the Mohican. What is marked near here, on the county atlas, as

an ancient mound is more ancient than the map-maker supposed, it being not artificial, but a small mound of slate left by erosion. From here northwest, to a point a little above the junction of Lake Fork with Mohican River, till and boulders are continuous. This is near the southwest corner (Section 12) of Washington township. From this point down to the junction and a half mile beyond, is a terrace of very coarse material, largely composed of granitic pebbles. Elevation above the river 107 feet. No till was discovered in the western projection of Knox township. From this point we drove through Nashville to Millersburg, on a road parallel with the glacial boundary, and about two miles north of it. Till is continuous, and evidently deep, there being but few out-cropping rocks in the whole distance. Cuts in the till frequently showed a depth of from 10 to 15 feet, with no signs of bottom. Two wells were reported, on the hills crossed, as going 25 feet without striking rock. Boulders are everywhere abundant. To the north stretches the characteristic levelled area of the glaciated region. The ice, with its burdens, evidently came up to the watershed between Paint Creek and Black Creek—its serrated edge barely surmounting it.

KNOX COUNTY.

The boundary line of the glaciated region, which, in the western part of Holmes county, was bearing slightly northward, suddenly turns to the south in the eastern part of Hanover township, Ashland county; passing thence into Jefferson, the northeastern township of Knox county, and thence through the western portions of Union, Butler, and Jackson townships, along the eastern margin of the county. The change of direction was so abrupt as at first to confuse, and afterwards to startle us. But, as usual, we found the departure from the general law of glacial movement less than would at first seem to be the case. From Salamanca, in New York, the moraine, with slight variations, bears continually southward, as well as westward.

JEFFERSON TOWNSHIP.

There are a few granitic boulders, and some glacial gravel, on the road from Jelloway to Greersville, one-half mile east of Greersville. Near the same place on the Danville road, by the Methodist church, there is a larger collection of pebbles, and perhaps till. This is in a valley, on a branch of the Jelloway, running south. But the hill to the west is free from drift; likewise the hill to the east, occupying Sections 4 and 7, is without till. But in the valley of a small tributary to the Mohican, a little south and east, in Sections 3 and 8, there are accumulations of till in ridges from 10 to 15 feet high. These are best shown upon the farm of G. Greer, in Section 8. From this point to the south line of the township till is continuous, but does not extend eastward into Sections 12 and 19. The Cleveland, Akron, and Delaware Railroad enters the glaciated region from the east through a cut in till, one mile east of Danville, and very nearly upon the line between Jefferson and Union townships. This cut is 375 paces long, and is from 20 to 36 feet in depth. The pebbles average from 2 to 3 inches; but there are a few boulders of considerable size. The hills to the southeast show no till.

UNION TOWNSHIP.

The old village of Danville is built upon a hill in the extreme northwestern part of the township. The height of this hill is by barometer exactly the same as that of the depot at Mount Vernon. This hill is composed of till. A. J. Workman reports a well 126 feet deep as passing through yellow clay, blue clay, gravel, quick-sand, and cemented gravel, and still not reaching rock. Another well of 65 feet, through similar material, was reported. One and a half mile south of Danville, on the Millwood road, a large deposit of till forms the divide between Owl Creek and Mohican River. The east and west line of this deposit is sharply defined, running through the eastern part of Section 14, and the central part of Section 17, to Millwood. On the east side of the small brook, running into Millwood from the north, drift is absent; but on the west side it is bounded by a range of gravelly knolls and

kame-like ridges. These are composed of glacial material, and are 117 feet above the brook on the north of the village.

BUTLER TOWNSHIP.

On the south side of Owl Creek a thin deposit of till covers the whole western range in Butler township, the boundary line swinging a little to the east until it enters Jackson township in the northeastern corner of Section 4. But the deposit is nowhere so marked in this township as to deserve to be called a "terminal moraine." The limit, however, is pretty sharply defined.

JACKSON TOWNSHIP.

In this township the boundary line enters upon the north, two miles east from Clay township, and continues in a southeasterly direction to the south line, about three miles east of Clay township. At the cross-roads in Section 8, we turned east into till of considerable evident depth. This disappeared in three-fourths of a mile, and did not reappear until we had gone one mile south to the church in Section 12, and turned west one-half mile. Here, on turning the summit of the hill, two miles north from the south, and $2\frac{3}{4}$ miles east of the west line, we struck into a continuous deposit of till stretching westward. This is upon the watershed, and is 300 feet (B) above Wakatomaka Creek. Upon crossing this creek, and striking the Zanesville road in the northeast corner of Eden township, Licking county, and driving northwest to Martinsburg, found till of great depth all the way. Occasionally the tops of the hills exposed rock in place, but Paul Run is nearly filled with till.

LICKING COUNTY.

The glacial boundary line enters Licking county in the northeast corner of Eden township, passes through the northwest corner of Mary Ann, the eastern sides of Newark and Licking townships, nearly on the line between the latter and Franklin and Bowling Green townships.

EDEN TOWNSHIP.

From Fallsburgh Post Office to Simpkin's corner, in the extreme northwestern portion of the township, the road follows the watershed. No till or boulders whatever appear upon it. At Simpkin's corner a few granitic pebbles appear, but there is no till until reaching the farm of A. D. Larrison, in Eden township, one-eighth of a mile south of the Knox county line, and three-quarters of a mile west from the line between Fallsburgh and Eden township. This is upon a height of land about 350 feet above the creek, and granitic boulders three and four feet in diameter are abundant. Patches of till continued to appear upon the road following the watershed south for $2\frac{1}{2}$ miles; crossed Rocky Fork near J. Elliott's; there was but little drift in this valley at this point. Upon ascending the watershed to the west, in Section 13, found a considerable depth of till, which continued for a half mile west and a quarter of a mile south; but the diagonal road running southeast, and keeping along the watershed between Rocky Fork and Wilkin's Run shows no till to the town line; but a few white granitic boulders were observed. Till, however, appeared $1\frac{1}{2}$ miles west in the valley of Wilkin's Run.

MARY ANN TOWNSHIP.

The deposit of till is not continuous over the western part of Mary Ann, but a considerable amount appears in Section 6, and the southwestern corner of the township is completely enveloped in a deep deposit.

The terrace deposits in the neighborhood of Wilkin's Run post office are noteworthy. One-half mile southwest of the post office this terrace is 92 feet high, and composed of water-worn pebbles with no large boulders. This continues up the small branch nearly to the line of Madison township, where it merges into the deposit of till. Two miles east of Wilkin's Run the deposit is still noteworthy, and presents the appearance of extensive kames. The southwest corner of this township, and the southeast of Newton, are deeply enveloped in till. Wilkin's Run was one of the glacial outlets, and the

terrace deposits are such as usually mark the streams as they emerge from the boundary of the glaciated region.

NEWARK TOWNSHIP.

At the city of Newark the three forks of the Licking River unite. All of these drain the glaciated region upon whose eastern border Newark is situated. The extensive gravel plain upon which the city is built is about 20 feet above the river, and is the deposit of these streams in the last stages of the glacial period when still swollen by the floods of the melting glacier; while terraces of a still higher altitude surround the plain, marking the size of the floods at a somewhat earlier date, when at their greatest extent. The terrace upon which the city cemetery is situated is 108 feet above Licking River. Southeast of the city, a terrace near the river is something over 60 feet above it. The eastern limit of till in this township coincides in the northern part with the east line of the township, though in this part of the township many of the hills are free from till. As, however, you go east from the North Fork, along the town-line road, between Newark and Newton, the till appears to be of great depth, and stretches away to the north in such hummocks and ridges as usually characterize the moraine. The elevation here is 200 feet (B) above the North Fork. South of the city, on the Linnville road, till envelops everything to the summit of the high lands, where it is evidently of great depth. The elevation is about 300 (B) above Newark.

LICKING AND FRANKLIN TOWNSHIPS.

The glacial boundary follows very closely the line between Licking and Franklin townships. To the west everything is enveloped in till; to the east are the familiar rocks and gorges of the unglaciated region. Many boulders were found, and a considerable amount of drift, along Claylick Creek, in the centre of Franklin township. This, however, seems to be a water deposit, formed by streams and floating ice, which came over the low place between Swamp Run and Claylick Creek. The gap in the watershed between these streams is

150 feet lower than that of the hills to the north and south, and the valley through which Claylick Creek now empties to the north appears to be very narrow. There certainly is no till on the hills, either to the northwest or southeast of this depression. The road along the town line, from Hog Run to Amsterdam, in the southwest corner of Franklin, is all the way over a deep deposit of till containing many granitic boulders. Amsterdam is 400 feet (B) above Newark, and commands a most extensive view of the fertile and level glaciated region to the west, and of the broken region to the east. Near the Presbyterian Church upon the most commanding point near Amsterdam, is an Indian mound 21 feet high, and 124 paces in circumference. East of Amsterdam a drive of three miles to Linnville disclosed no till, but south and west the deposit is continuous and deep. In the southeastern part of Licking township, east of the reservoir, the road runs for half a mile upon the summit of a ridge of kame-like hills containing many granitic boulders. This ridge seems to cross the valley, and to be a true moraine barrier, restraining the waters of Reservoir Lake. The railroad near here shows very good sections of this ridge, and of other ridges parallel to it. They are from 15 to 30 feet above the level of the valley, but how much of their base is obscured by subsequent deposits there is no means of telling. Through this depression east of the reservoir, on the line between Licking and Perry counties, there was evidently a great overflow of glacial water, emptying through Jonathan Creek into the Muskingum, below Zanesville.

PERRY COUNTY.

The moraine passes in this county, in a north and south direction, through Thorn and Reading townships.

THORN TOWNSHIP.

We have already described the glacial accumulations east of the reservoir, where they pass from Licking county into this township. The reservoir occupies a great kettle-hole. The railroad which here cuts through the moraine follows for sev-

eral miles towards the southeast an outlet for the glacial floods. This occupies a valley about a mile wide, through the middle of which kame-like ridges of gravel 15 to 20 feet in height extend ; but these are flanked on either side by deposits of black muck. On turning up a tributary towards Somerset, these deposits cease. The headwaters of the stream are in an unglaciated region.

Thornville is upon a hill of till containing numerous granitic boulders, and which is about 300 feet (B) above Newark. A well upon this hill was reported as passing through 10 feet of soil, 25 feet of blue clay. Southeast from Thornville the till is, for the first mile, very deep, with very numerous and large granitic boulders. Till continues a mile farther to Section 23, and thence south to the northwest corner of Reading township. But from Section 23, Thorn township, to Somerset (seven miles southeast), and thence west to the branch of Rush Creek, a mile west of New Reading, the country is wholly unglaciated.

READING TOWNSHIP.

The northwestern section of Reading township presents a level and rich expanse of territory, produced by the glacial floods coming down from the southern part of Thorn township. The contrast between the western sections of this township and everything east of Rush Creek is very marked. The road running south, near the western line of this township, is through a region deeply enveloped in till, as far as the pike, a little east of Rushville. A drive on the pike, of half a mile, into Reading township, toward Somerset, brings one into the unglaciated region.

FAIRFIELD COUNTY.

The glacial boundary enters Fairfield county, a little south of the Somerset and Lancaster pike in Richland township, and crosses the northwest corner of Rush Creek township, the southeast corner of Pleasant township, the northwest corner of Bern, through the center of Hocking township, and the western sections of Madison township to the line between Pickaway and Hocking counties.

RICHLAND TOWNSHIP.

The Somerset and Lancaster pike suddenly enters extensive deposits of till, upon passing from Perry to Fairfield county, a mile and a half east of East Rushville; but a drive of a half mile south carries one entirely beyond the range of till. From Rushville one must drive a mile and a half south to reach the unglaciated district. But here on both sides of the creek, the passage from the glaciated to the unglaciated is sudden. On the north part of H. Geiger's farm, east of Rush Creek, and one-half mile north of the township line, the glacial limit is marked by hummocks of till, which are at least 50 feet in depth; while on the west side of the creek the boundary is near the town line in Rush Creek township, on the farm of J. D. Martin. Large granitic boulders abound along the glaciated margin through Richland township. The elevation is 250 feet (B) above Lancaster, and about 200 feet above Rush Creek. There is no barrier in this vicinity to stop the southern progress of the ice. A detour of several miles to Bremen demonstrated the absence of till to the southeast.

RUSH CREEK TOWNSHIP.

The characteristics of the glacial boundary through Rush Creek township are very similar to those in Richland. The remnants of a boulder of dark, hornblendic rock, on the farm of J. D. Martin, one-fourth south of West Rushville, measured 10x8x3 feet out of ground. Probably one-third had been removed by blasting. The elevation is 250 feet above Lancaster, and there is no southern barrier to account for the sudden termination of the till. Four or five miles to the south, across the valley of the west branch of Rock Creek, an escarpment of Waverly sandstone hills is a striking feature of the landscape. There is no till in Sections 17 and 18 of this township.

PLEASANT TOWNSHIP.

From Rushville to Lancaster the pike bears southwest. The glacial boundary enters Pleasant township, one mile south of the pike, intersecting the pike again near where it passes from Pleasant township to Bern. The road running to Lancaster,



PLATE XII.

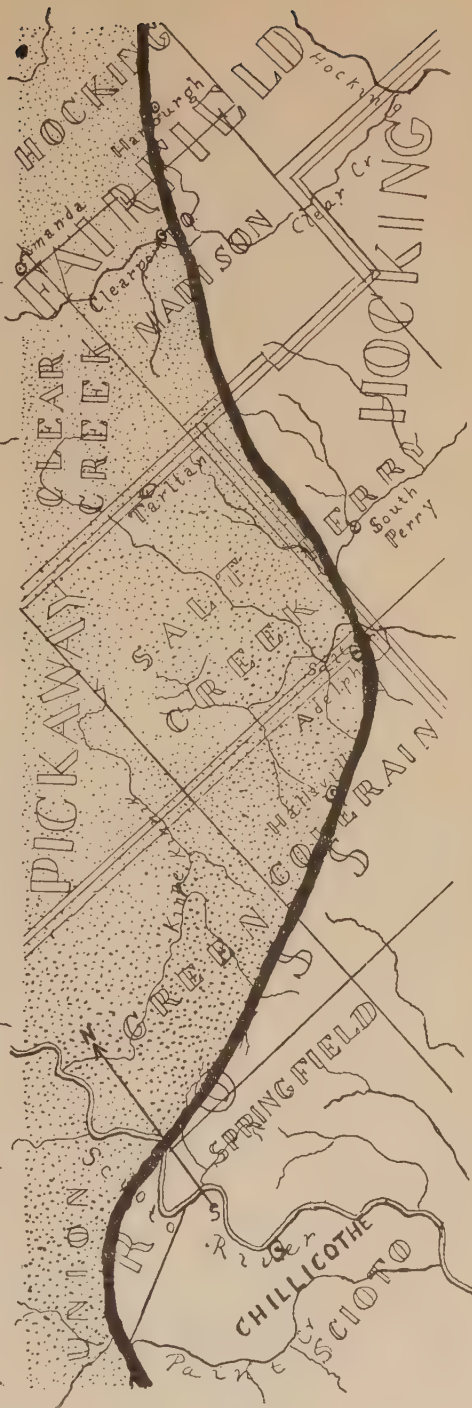


PLATE XIII.

parallel with the pike, and about one mile northwest, is through a region everywhere enveloped with till, a great amount of it resting upon the hills 250 feet above the city. It is at the intersection of this road with that to Pleasantville that the celebrated granitic boulder referred to by Professor Andrews (see his *Geology*, pp. 211, 212) is found. This is in the valley of Baldwin's Run, is hornblendic in character, and measures 18x12x6 feet out of ground. Boulders were left upon the summit of Pleasant Mountain, a mile north of Lancaster, and about 300 feet above it.

BERN TOWNSHIP.

The moraine enters the northwest corner of Bern township, near the city of Lancaster, but its course is here somewhat disguised by the water action in the Hocking Valley, which it here intersects. The Cincinnati and Muskingum Valley Railroad, east of Lancaster, passes through a low valley into the tributaries of Rush Creek. This valley is bounded upon the south by an escarpment of Waverly sandstone, rising about 250 feet. A drive across the country, back of this escarpment, from Lancaster to Bern Station, failed to disclose any signs of glaciation: but the valley itself is partially filled with gravel, brought in by the various glacial tributaries from the north. This deposit of gravel is especially noticeable near Bern Station, where the gravel accumulation brought down by Raccoon Creek, forms a hill 50 or 60 feet in height. Till and boulders appear between the Logan and Chillicothe road, at an elevation of about 50 feet, one mile south of Lancaster.

HOCKING TOWNSHIP.

The course of the Mayesville and Zanesville turnpike, through Hocking township, is everywhere over a vast deposit of till. This is true not only when it follows up the valley of Hunter's Run, parallel with and close to the railroad, but after it crosses the railroad to the south, and rises upon hills which are 450 feet above Lancaster, near the southwest corner of the town. Here the till is piled up to a great height, upon the summit of the sandstone escarpment which overlooks the plains to the north made smooth and fertile by glacial action. On the

farm of S. Peters, in Section 20, 450 feet above the canal at Lancaster, a well was reported 40 feet in till; another, near by, 20 feet. The parallel road, two miles southeast, shows no till from Hamburg post office toward Lancaster, for three miles, to its intersection with Arney's Run; for the rest of the distance till is continuous and deep. But occasional granitic boulders crown the summit of the sandstone hills running parallel with these roads and half-way between them, and rising 450 feet above the canal. Muddy Prairie, in the southwestern corner of this township, is a shallow kettle-hole of great size, which has been filled by the accumulation of peat. Its natural drainage is by a long circuit to the west, but by a little ditching it is made to empty by a shorter course through Muddy Prairie Run.

MADISON TOWNSHIP.

On leaving Lancaster the glacial boundary turns rapidly toward the south, and passes through Madison township nearly in a north and south direction, through Sections 4, 9, 16, and 21. It crosses Clear Creek at Clearport, near the junction with Muddy Run, at an elevation of about 200 feet (B) above Lancaster. Everywhere along this distance the glacial accumulation abuts closely against an escarpment of Waverly sandstone; yet covers hills to the west, in Clear Creek township, of equal height with them, namely, 450 feet above Lancaster. The line bends a little west as it emerges from this township, and enters Hocking county.

PICKAWAY AND HOCKING COUNTIES

The moraine follows so nearly the line between Pickaway and Hocking counties that we shall do best to consider them together.

Driving east from Tarleton, in Pickaway, to the line of Hocking, till and granitic boulders are continuous and abundant to the Hocking line, and for nearly a mile farther east; but here they suddenly cease, and do not reappear on turning north until reaching Section 20, in Madison township, Fairfield county. Driving southeast from Tarleton, till is continuous until crossing the county line, northwest of South Perry

post office. A section of till upon the county line here shows at least 30 feet in depth. The elevation is 300 feet above Circleville. One mile east of the county line till had entirely disappeared. There is no till in the valley of Laurel Run for a mile and a half west of South Perry. Hills of Waverly sandstone arise on every side about the village. There is no till upon them, but a granitic fragment 6 in. by 4 in. was found upon a hill a few rods north of the village, and 225 feet (B) above it. This is 300 feet above Circleville. Across the Run, on the south side, the ridge road to Adelphi rises 375 feet in one and one-half miles, and turns west upon the summit, near the southern line of Perry township, and three miles from its western boundary. This is by barometer 450 feet above Circleville, and the level touches the tops of the hills in all directions. This road continues for three miles west upon the summit of a narrow ridge of sandstone, left by the erosion of the streams. From it one looks down on either side into gorges between 300 and 400 feet in depth. On driving upon this ridge about three miles westward, we struck a collection of granitic pebbles upon the very summit, about one mile northeast of the southwest corner of the township. The pebbles were small, but of a variety of kinds. Three-fourths of a mile farther west, while still 275 feet above South Perry, began to find till. Granitic boulders continue frequent to Laurelville, at the junction of Salt Creek and Laurel Creek. The level of the stream is here 75 feet lower than that at South Perry.

ROSS COUNTY.

Nowhere in Ohio is the glacial boundary marked by larger accumulations than in Ross County, through which it extends diagonally from the northeast corner to the southwest—passing through the northwest corner of Colerain, the southern part of Green, the southern part of Union, the northern edge of Twin, the southeastern part of Paint, and the western part of Paxton townships.

COLERAIN TOWNSHIP.

The village of Adelphi occupies the northeast section of Colerain township, and is built upon an irregular deposit of

till worthy to be compared with the terminal moraine on Cape Cod in Massachusetts, and with that upon the Pocono plateau in Pennsylvania, and that west of Canton in Stark county. Salt Creek bursts through this moraine a few rods northeast of the corner of the county, and makes off to the southeast, through a narrow valley 450 feet deep, and for a short distance is bounded on the east by extensive gravel terraces. The moraine accumulation upon which Adelphi is built abuts upon this creek towards the east, and there is here a perpendicular exposure of till 188 feet in depth. The creek is constantly undermining it, and an extensive slide is in progress which has already carried away a considerable portion of the cemetery. The height of this cemetery was taken by level. West of the village where the land is higher the barometer indicated more than 200 feet. On driving south from Adelphi, up Brimstone Hollow, till continued for one mile, and occasional granitic pebbles were found for two miles farther, where the summit of the Waverly sandstone escarpment was reached, at a height of 400 feet (B) above Salt Creek. Turning west upon this ridge, a little till was found upon the very summit after going a mile, and just before beginning to descend towards the north into the valley of Reed's Ford. On descending into this valley, a hundred feet or more, drift began to appear. This was at first water-worn, and in terraces, as would be natural in a valley beginning, as this does, a little south of the glaciated line, and opening to the north. On reaching Section 14, near the residence of Isaac Delong, till appeared in large quantities, with many granitic boulders, some of them from 6 to 8 feet in diameter. On going a mile and a half farther north, this road reaches the turnpike, two miles from Adelphi, which, over all this distance, follows the summit of a true moraine deposit. To the northwest, stretch the fertile plains of Pickaway county, lying fully 150 feet lower than the summit of this moraine. To the south rises, near by, the escarpment of Waverly sandstone, which forms the northwestern boundary of the great coal formations of the State. The granitic pebbles which we had found upon the summit of that escarpment in Ross, in Hocking, and in Fair-

field counties, show that the ice was at least 400 feet thick over all the plains to the north.

This moraine ridge continues southwest from Adelphi in about the same proportions, and in similar relations, to the plain upon the north, and to the hills upon the south, until it enters Green township, two miles from the southern border. All along through Colerain township, in driving a mile south from the pike, one strikes out of the till, and after crossing a little valley, plunges into the deep gorges which everywhere characterize the sandstone regions beyond. Professor Orton had noted the boundary with great accuracy. (See Ohio's Geol. Report, Vol. II, pp. 651, 652.)

GREEN TOWNSHIP.

The moraine enters Green township from the east in Section 24. Till continued to the northern edge of Section 25, where it suddenly disappeared on the watershed. A drive of two miles south into Harrison township demonstrates the total absence of till over the southeast corner of Green. On driving over the diagonal road northwest till appeared at the watershed in Section 25, nearly one mile from the south line, and a mile and a half from the east line of Green township. The accumulation of till is large along the road between Sections 26 and 27. The diagonal road running southwest through Sections 27 seems directly upon the moraine, and between this glacial accumulation and the rocky hills to the south there is a space of about half a mile, occupied by a small stream whose headwaters are in Section 33. In the southern part of Section 29 there are enormous kame-like ridges of gravel, from 100 to 150 feet (B) in height, and running north and south. The material of this kame is rather fine, and is largely composed of limestone pebbles. The Pick-away plains here contract into the valley of the Scioto, which, through the rest of its course, is nowhere more than two or three miles wide, and is bounded on either side by precipitous hills of slate and sandstone. In the northeast corner of Section 31, the water-worn material of the kame gives place to till, which contains many granitic pebbles a foot or more in diameter. In crossing the head of the Scioto Valley, on a

road running east and west through this point, three parallel ridges are encountered, running nearly north and south, each one in order toward the river extending farther south.

SPRINGFIELD TOWNSHIP.

About halfway between Hopetown, in Springfield township, and Chillicothe the first terrace (over which the railroad runs) is about a half mile in width. The second terrace, which occupies the remaining space to the hills on the east, which is also about a half mile in width, rises abruptly 48 feet above the river.

UNION TOWNSHIP.

In driving up the Scioto, upon the west side, from Chillicothe, the road follows the first terrace, which is about a mile wide, and 20 feet above the river. Kame-like ridges appear in Union township, nearly opposite the southwest corner of Green, and just above the second toll-gate, where the Clarkson pike branches off to the west. The cross-road leading directly west from this point ascends 400 feet (B) in the first mile. Granitic boulders are abundant at this elevation, and a well one-half mile south passes 33 feet through what was called "gravel," but is doubtless "till." Granitic boulders appear upon this plateau for a half mile or so farther south. The till is of great depth, one-half mile north of the centre, on the farm of J. A. Hurst. From the centre, southwest, past the houses of M. A. Pinto and W. R. Bowdle, to the Frankfort pike, the road continues upon the highlands, and passes many granitic boulders, and through occasional deposits of till, but the till is not deep. There is considerable development of till at the cross-road near the house of Susan Beard, and again, upon descending the hill to the turnpike near the house of Jacob Flescher; but no till appears along the pike to the west for a mile, where, upon descending about 150 feet, the road enters, at about 150 feet above the north fork of Paint Creek and about a mile and a half east of Frankfort in Concord township, a deposit of till which is unbroken to the north and northwest. The railroad from Chillicothe to Roxabel strike into extensive drift deposits at Anderson's, upon the north fork of Paint, which is specially abundant at Musselman's.

The deposit here is at least 25 or 30 feet deep, and looks like till, though the material is very fine.

CONCORD AND TWIN TOWNSHIPS.

One-half mile south of Musselman's, upon the Greenfield pike, in Twin township, there is a small deposit of till, near the school-house, upon the farm of C. C. Plyley. The road is here 550 feet (B) above Chillicothe, and continues at this height west to Lattaville, in Concord township. A mile east of Lattaville, a well upon the farm of J. McConnell passed through 12 feet yellow clay, 3 or 4 feet blue clay, 10 feet yellow clay, 5 feet gravel. About 13 feet from the top a piece of wood 3 or 4 feet long and 3 inches through was found in clay. From this point the eye surveys a vast extent of till in the valley of the North Fork of Paint, which is about 400 feet lower. But the hills facing the north are here completely enveloped in till. The ice seems for a long while to have crowded down to this rocky escarpment, and for a short time to have overlapped it upon both sides of the North Fork.

Lattaville, in Concord township, is built upon a striking development of the moraine. The turnpike follows the moraine across the southeast corner of Concord township. The general elevation is from 150 to 200 feet above the valley of the creek, while knolls and ridges of till rise 50 or 60 feet higher. About one mile south is the continuation of the rocky hills 200 or 300 feet higher, through which the North Fork of Paint Creek has cut its way below Frankfort. One mile south of Lattaville till and many granitic boulders appeared near T. M. McDonald's, upon the very summit of the plateau, 625 feet (B) above Chillicothe. A mile southwest, upon the other side of the watershed, in the upper valley of Lower Twin Creek, there is a small amount of till near the school-house. South and east of this to the valley of Paint Creek there is no more till. There are some remarkable kames and terraces in these two townships which deserve notice. As we have said, the North Fork of Paint Creek, above Frankfort, flows through a broad expanse of glaciated country everywhere enveloped in till and dotted with granitic boulders. Two miles southeast, near Musselman's, it enters a

narrow valley about 400 feet deep, and a half mile wide, in which it continues for about 5 miles; when it comes out into a broader valley, and flows southeast until it unites with the Scioto below Chillicothe. Before the river enters this gorge separating Union from Twin Township, the valley is marked by numerous kame-like ridges, running nearly parallel with the stream. Between Frankfort and Roxabel numerous kettle holes appear. One and a half mile south of Frankfort, on the south side of a small tributary to the creek, is a kame 57 feet above the general level of the valley. Granitic pebbles are numerous in this. One near the summit measured 3 feet. This kame runs at least three-fourths of a mile to the southeast. Upon emerging from the gorge below Frankfort, in the eastern angle of Twin township, between Paint Creek and North Fork, extensive kames are found to connect the two valleys along the line of Cat Tail Run. The material in these kames is water-worn, and ranges from pebbles of granite 2 feet through to fine sand. Granitic boulders 3 feet through occur on the top of the gravel ridges. These ridges are more than 180 feet high, and descend upon each side at an angle of 25 or 30 degrees. Near the residence of Captain Phill. A. Rodes, facing Paint Creek, near the outlet of Wilcox Run, the kame is 158 feet high, and encircles a kettle-hole of great dimensions.

It is very clear, as Professor Orton surmised (see Geological Survey of Ohio, vol. II, p. 653), that Paint Creek, in preglacial times, passed northward, and joined the North Fork, near the eastern angle of Twin township; but in glacial times that outlet was obstructed by ice, and partly filled with gravel, so that the creek left its broad valley, and has cut a channel for three miles across the rocky escarpment, which here formerly separated it from the Scioto. This post-glacial channel, which it now occupies, is "not more than 200 feet in width at the base, is bottomed with rock, and is bounded by precipitous cliffs not less than 300 feet in height. After following a southeast course for three miles, it turns again to the northeast, and regains its old valley two miles west of the south line of Chillicothe."

From the fact that the old valley of Paint Creek is filled only to about one-third the height of the surrounding hills, it seems clear that the ice-front itself rested over the eastern angle Twin township long enough for the creek to wear the gorge just described to nearly its present depth. Perhaps this would require 2,000 or 3,000 years.

BUCKSKIN TOWNSHIP.

The boundary of the deep accumulation of till enters Buckskin township a half mile or more south of the Greenville pike, and crosses in a pretty direct line to Paint township, one-half mile or more south of Salem. The road from the Greenville pike, near Henry Parrett's, to Salem, leads over a continuous deposit of till thrown up into low hills and ridges. The rocky escarpment extending from the Scioto River through Union and Twin township, crosses Buckskin township about a mile and a half southeast of Salem. We did not ascend it in this township, but from what we have described in Twin township, and from what we shall describe in Paint township, it is probable that the ice-sheet overlapped these hills, which are all along from 400 to 500 feet above the land to the north.

PAINT TOWNSHIP.

With the exception of the northwestern corner, Paint township consists of sandstone ridges left from the erosion of a continuous plateau, which was from 500 to 550 feet (B) above the valley of Paint Creek at Bainbridge. The ice surmounted these summits, and left considerable deposits of till and granitic boulders upon them, near the residence of D. H. Pricer, 3 miles south of Salem, and at various places along the ridge road south to Bainbridge as far as Henry Benner's. Near D. H. Pricer's, at an elevation of 550 feet (B) above Bainbridge, was a boulder of hornblendic rock, about $5 \times 3 \times 2$ feet. Many boulders $2\frac{1}{2}$ feet through appeared at this elevation farther south.

PAXTON TOWNSHIP.

No till was observed in Paxton township, except near the woolen factory on Buckskin Creek, whence it appears at intervals both on the road leading up the creek to the north,



PLATE XIV.

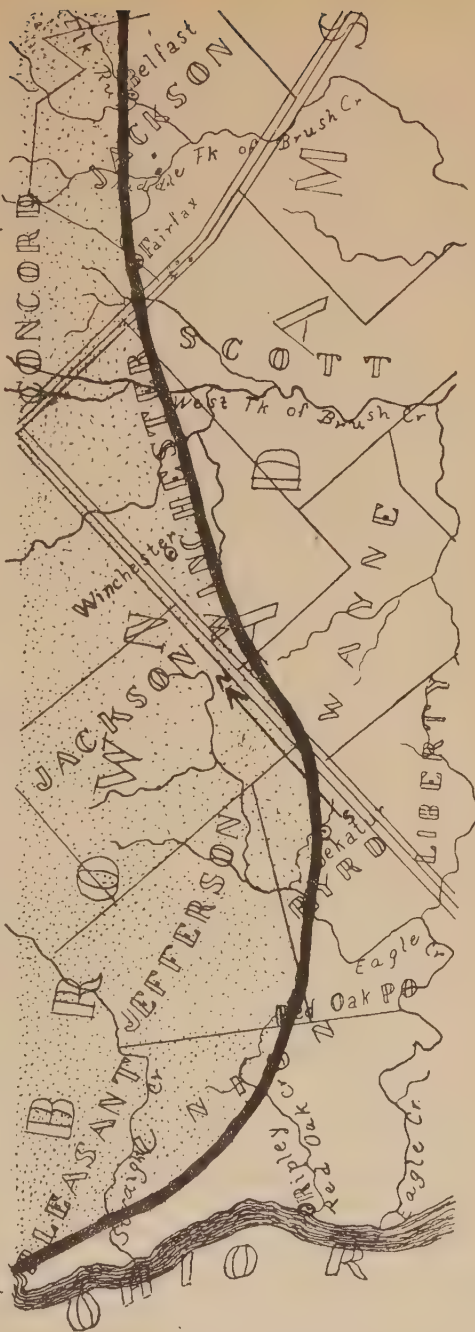


PLATE XV.

and also on the road to the right, leading upon the hill along which we marked the line of till and boulders in Paint township. A little till also appears in the northwestern corner of the town, near Rocky Fork.

Bainbridge is in a valley about a mile wide, which has been cut down through parallel strata of sand rock and shale to a depth of about 500 feet. The village is built upon a terrace whose surface is about 25 feet above high-water mark. The material varies from coarse sand to well-rounded pebbles 4 or 5 inches through. Limestone prevails, though granite is also present. A granitic boulder 4 feet in diameter was observed. One mile west of Bainbridge the terrace rises suddenly 15 feet. Just below the junction of Rock Fork till appears in small hillocks. The elevation is 125 feet (B) above Bainbridge. From this point to Hillsboro, in Highland county, signs of glaciation are continuous.

PIKE COUNTY.

Following south from Paint Creek, along the Ross county line, till disappears suddenly one-quarter of a mile north of Cynthiana, in the extreme northwest corner of Pike county. To the west and southwest till is abundant.

HIGHLAND COUNTY.

The boundary enters Highland county, near the northeast corner of Brush Creek township, and continues, in a southwest direction to Marshall township, about one mile north of its southeast corner. The deposits are continuous along the road from Cynthiana to Carmel post office, south southwest to the school-house by J. West's, near the head of the middle fork of Brush Creek, and three-quarters of a mile south of the road from Sinking Spring to Marshall. To the southeast of this line across Brush Creek township, there are hills of sand rock and shale of great height. On the east side of these hills, two miles south of Carmel post office, near the residence of D. W. Scammahorn, there is, however, an extensive deposit of till, which continues on the road south nearly to Baker's Fork, but there disappears. From this point around to Cynthiana no till was observed.

MARSHALL TOWNSHIP.

There are heavy deposits of till all over the northern part of Marshall township. It is specially abundant south and west of the village, with many granitic boulders 3 and 4 feet in diameter. Towards the southeast part of the town the spaces upon which there is no till are extensive. But at the corner, by Jacob Kesler's, is a small deposit of till, with granitic boulders. There is none upon the road east to Brush Creek, and none south to Jackson township. The distance from each of these townships is about a mile. But a half mile west from Mr. Kesler's an extensive and deep deposit of till begins, and is continuous to the west for at least a mile.

JACKSON TOWNSHIP.

The moraine may be said to enter Jackson township one mile northwest of North Uniontown. Upon the road from Marshall to Belfast till is continuous to the west branch of Elk Run, and on the road from Uniontown to Belfast there is no till for two miles. Upon descending to Elk Run, near R. B. Matthew's, granitic pebbles appeared at an elevation of 50 feet above the bridge. Upon ascending the west bank there were occasional appearances of till all along, which, at the cemetery, near J. Weaver's, one-half mile northeast of Belfast, was very abundant. From Belfast, upon the pike towards Hillsboro, saw no till for three miles; but there was an occasional boulder, one of which, a mile north of the township line, was between 3 and 4 feet in diameter. North of this, till was continuous. West of Belfast no till appeared in the valley of Brush Creek; but two miles northwest, near Joseph McCoy's, was a considerable deposit of till. Granitic pebbles occurred upon the ridge a mile farther south, near the school-house, by Mrs. Phoela Ford's. This is at an elevation of 600 feet (B) above Cincinnati, and 400 feet (B) above Belfast. On the Ridge road from here to Newmarket there was scarcely any till, but scattered granitic pebbles. The elevation is between 600 and 700 feet (B) above Cincinnati. From Newmarket there was a continuous sheet of till, in places very deep.

Along the town line south of Fairfax to Adams county there is a continuous and extensive accumulation of till at an elevation of 650 feet above Cincinnati. Upon the road running southeast from Fairfax granitic boulders are occasionally found for three-quarters of a mile, but beyond that are absent, and no more could be found upon the east side of Rocky Run.

ADAMS COUNTY.

The boundary line of the glaciated region enters Adams county in the northwest corner of Scott township, near the line between Concord and Jackson townships, in Highland county. Between Winchester Post Office and Mount Lee the till is nearly continuous, though not deep. The west fork of Brush Creek is remarkably free from drift material, and no till appears upon the road from Mount Lee to North Liberty. On the railroad from Winchester to Youngsville, on the east side of Elk Run, two miles from Winchester, is a cut in till from 10 to 20 feet in depth. Angular granitic boulders are found near here from $2\frac{1}{2}$ to 3 feet through. On the road northwest from North Liberty large deposits of till occur, near Elk Run, two miles southeast of Winchester Village. The deposit was from 5 to 20 feet in depth. In driving from Winchester to Eckmansville, on the south border of Wayne township, till is continuous to within a mile of Eckmansville, where it disappears. On turning southwest from Eckmansville, across the northwest corner of Liberty township, the deposit of till is re-entered near the county line.

BROWN COUNTY.

On the road from Eckmansville to Ripley till is continuous through Byrd township. Two miles and a-half southwest of Decatur, near the Christian Church, and not far from Jefferson Post Office, is a granitic boulder 2 or 3 feet through. Till continued to Red Oak Post Office, in Jefferson township. The road from here to Ripley descended through a gorge 450 feet deep. Found some small pebbles upon the summit of the hills north of Ripley; also, in Lewis township, upon the summit of the hills, 2 miles north of Higginsport, found thin deposits of

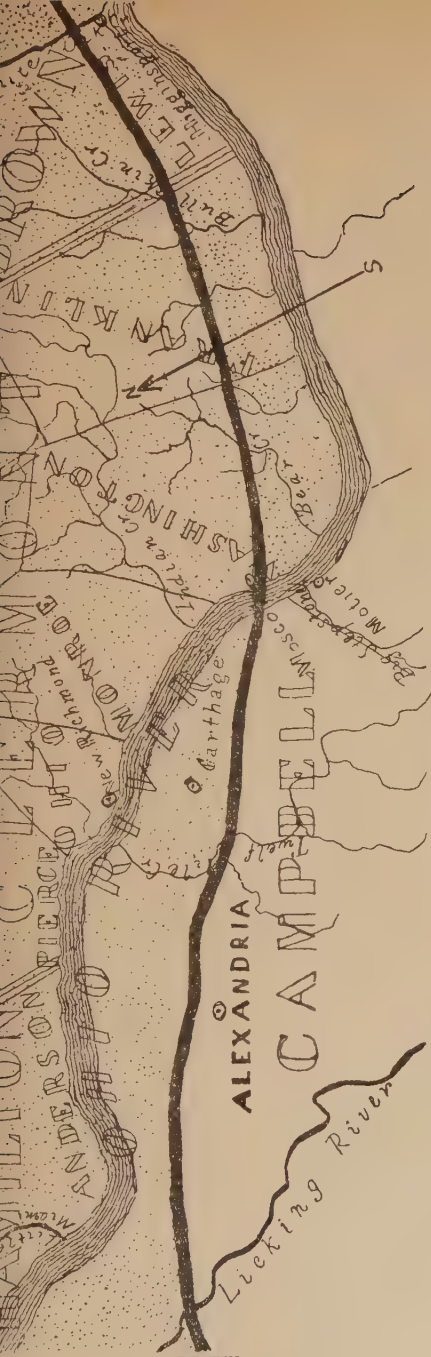


PLATE XVI.



PLATE XVII.

till. A granitic boulder, measuring $3\frac{1}{2} \times 2\frac{1}{2}$, and $1\frac{1}{2}$ feet out of ground, was found in a small brook about half way up these hills. Franklin and Washington townships, in Clermont county, I have not examined, but I presume the glacial boundary approaches pretty close to the river. (See remarks below upon Kentucky.) Mr. Charles W. Smith informs me that there are small granitic boulders on the high lands two or three miles northeast of Ripley, and that on the highest hills in Ohio, opposite Augusta, Ky., pebbles of diorite and jasper are abundant; but diligent search upon the Kentucky hills, near Augusta, disclosed nothing but local *debris* of the stratified rocks of the region, except an occasional quartz pebble as large as the end of one's finger.

HAMILTON COUNTY.

At Walnut Hill Station is an extensive deposit of till from 10 to 20 feet in depth. Scratched stones and small granitic fragments are abundant in it. This is about 350 feet above the river. At North Bend the Cincinnati, Indianapolis and St. Louis Railroad passes from the valley of the Ohio to the valley of the Miami by a tunnel, through an extensive deposit of till. The height of this deposit above low water-mark is upwards of 160 feet. No large granitic pebbles were seen in it, but the examples of striated pebbles were numerous and excellent. Below North Bend the space between the Ohio and the Miami is occupied by a remnant of the limestone plateau through which the rivers have worn their present deep channels. This is 375 or 400 feet (B) above the river, and is about 4 miles long and 2 miles wide. Till and granitic pebbles 2 feet through are found upon this summit. They are also found in Indiana upon the summit, of equal height to the west and southwest, across the broad valleys of the Miami and the White Water.

KENTUCKY.

The glacial boundary enters Kentucky in CAMPBELL COUNTY, crossing the Ohio River about two miles north of the Pendleton county line. I have not examined sufficiently the northern part of Campbell county, and I can only fix the limit near the river. We crossed the river from New Richmond, in Ohio, and ascended through the channel of a small brook to the summit of the Kentucky hills, near Carthage. These hills are about four hundred feet above the river, and the ascent is very steep. Granitic pebbles were numerous in the bed of this small stream, and, upon reaching the summit, we found the surface covered with till to the depth of ten or fifteen feet, in which granitic boulders a foot through were numerous, and in which it was not difficult to find beautiful specimens of scratched stones. From this point we went south, keeping upon the summit of the plateau from one and a half to three miles from the river. Indications of glacial action continued, but in a somewhat diminishing degree, until reaching Flag's Spring, where they ceased entirely. But to make sure, we went on in the same direction about four miles farther, and came down to the river at Motier, without seeing any farther glacial marks. At Flag's Spring there is an extensive accumulation of post-glacial conglomerate like that at Split Rock, soon to be described.

KENTON COUNTY.

My examination of Kenton county has been too brief to be very satisfactory, but what I have seen may serve as a guide to others. Three miles southwest of Covington the hills are covered with loam from 15 to 40 feet deep, at an elevation of 400 feet (B) above the river. There are occasional small quartz pebbles in this loam; but I saw no sure signs of the actual presence of ice. In my notes I have said: "This seems like the bottom of a temporary lake when the ice dammed the river below." On going across from the pike a little south of this, so as to strike the Licking River, two miles

south of Covington flats, no glacial marks were observed. At Erlanger, however, the first station south of Ludlow, on the Cincinnati Southern Railroad, a railroad cut shows clay to a depth of six feet or more containing pebbles of quartzite, limestone, and occasionally granite, near the bottom. All, however, were small, none of them more than three inches in diameter. The elevation is about five hundred feet above the river.

BOONE COUNTY.

The glacial deposits over the northern part of Boone county are unmistakable in character. On ascending the hill along the line of the Covington and Petersburg pike from Ludlow to Hebron, we encountered about one mile east of Hebron, and about 450 feet (B) above the river, a deposit of till, twelve or more feet of which in depth is exposed by a little stream running to the north. The whole surface of the country about Hebron is covered with a loamy deposit containing occasional scratched stones and granitic boulders. On ascending the hill from Taylorsville to Hebron small granitic boulders abound all along the bed of the little stream, and are found of considerable size in the clay upon the summit. On the pike between Florence and Burlington, and two miles west of Burlington, where a small tributary of Gunpowder Creek, which runs to the south, crosses the pike, a large number of granitic boulders are collected, they having been washed out of the till which caps the hills. The elevation above the river is 400 feet (B). Three-fourths of a mile to the east the elevation is 575 feet (B), and the headwaters of this tributary, a mile and a half or two miles north, near Hebron, are 500 feet (B.) I counted within a few rods of each other 15 granitic boulders, one of which measured $2\frac{1}{2}$ feet in diameter. There were three or four boulders composed of metaphoric conglomerate, containing the beautiful red jasper pebbles characteristic of the eastern shore of Lake Superior, and of the region north of Lake Huron. They are identical in composition with boulders that are scattered over Michigan, Northern Indiana, and with one in the Oberlin Museum, found by Professor Allen in Brownhelm. Colonel Whittlesey brought a mass of this

rock from its native ledge, near Lake Superior, on the west side of St. Mary's River, and has adorned the yard in front of his residence with it. These boulders in Kentucky are found about five miles south of the Ohio River, and south of the watershed in that part of the county.

In a drive from Petersburg to Hebron, the hills were found to be covered with till to a height of several hundred feet. The barometer read about 400 feet above the river. The redness of the soil was everywhere noticeable, showing that the iron was thoroughly oxidized. A detour to the south, from Florence to Union, and from Union across Gunpowder Creek, towards Bellevue (now called Grant P. O.), demonstrated the absence of glacial deposits until reaching the headwaters of Middle Creek, about half way between Burlington and Bellevue. Here the tops of the hills are covered with a gravelly deposit, containing occasional granitic pebbles several inches in diameter. Near the headwaters of the southern branches of Middle Creek, and especially at Rock Spring, the deposits are of very coarse material, are of great extent, and are cemented together by an infiltration of lime like that already spoken of at Flag's Spring, and soon to be described at Split Rock. This conglomerate consists largely of pebbles of limestone, but contains also granitic pebbles. It was noticed as early as 1845 by Professor Locke, and described in the *Cincinnati Gazette*, and more recently by Dr. Sutton, of Aurora, who specially notices its great elevation above the river. Dr. Sutton's paper may be found in the proceedings of the A. A. S. for 1876, and reprinted, with additional information by Prof. E. T. Cox, in the Geological Survey of Indiana for 1878, pp. 108-113.

The most accessible place in which to study this deposit is near the mouth of Woolper Creek, about four miles northwest of the headwaters of Middle Creek, and about four miles south of Petersburg. The formation is here known as "Split Rock," and rises directly from the Ohio River, both above and below the mouth of Woolper Creek. Professor Locke "regarded this conglomerate as evidence of the destruction of a great arch of rocks which united the coal-fields of Ohio with

those of Indiana and Kentucky." Mr. Robert B. Warder, in the Geological Report of Indiana, for 1872, also directs attention to this Split Rock conglomerate, and suggests, possibly, it is the terminal moraine of an ancient glacier. With this view Dr. Sutton and Professor Cox substantially agree. But Dr. Sutton and Prof. Cox suppose that the deposits upon the highland above Middle Creek are far more ancient than those in the valley of the Ohio about the mouth of Woolper Creek. As we read the facts, however, now, in the light of the most recent investigations, these deposits upon the highlands of Boone county, and at Split Rock, are probably contemporaneous, the ice of the glacial period extending down to a continuous line which crosses the river at Woolper Creek. The vast current of water which flowed down at the melting of the continental glacier, was not determined in its course by the present channels as now, for these were in many cases filled with ice, and for a time the southward flowing currents were borne completely across the channel of the Ohio, flowing in a trough of ice, whose bottom was as high as the summit of Boone county.

The pebbles in the cemented mass of Split Rock are mostly of limestone, and are very coarse—individual pebbles frequently being from three to four feet in diameter. Granitic pebbles are infrequent. One was found, however, measuring two feet in diameter. The cliffs of this conglomerate, at the mouth of Woolper Creek, rise not far from one hundred feet above the river, and the material is cemented together by an infiltration of lime. Kame-like ridges extend for two miles south of Woolper Creek, on the way to Bellevue. These are composed of rather fine material, and are 160 feet above the river. The terrace upon this, the Kentucky side of the river, is, for two miles or more below Woolper Creek, remarkable for its height, being more than 100 feet above the river, and 56 feet higher than the high-water mark of January, 1883.

APPENDIX.

ABSTRACT OF THE BEARINGS OF GLACIAL STRIÆ AND GROOVES IN OHIO.

COMPILED BY COL. CHARLES WHITTLESEY.

NORTHEASTERN COUNTIES.

ASHTABULA COUNTY—

No observations, the rocks principally shale.

TRUMBULL COUNTY—

Farmington township.....S. 30° West.
Vernon township.....S. 20° 30° and 40° East.
Brookfield S. 5° East.
Over the Pennsylvania line, Shenango Valley.....S. 5° East.
Fowler township S. 4°, 30° and 45° East.
Braceville.....S. 45° and 50° West.
Lordstown South and S. 20° East.

MAHONING COUNTY LINE—

Austintown.....S. 30° and 35° East.
Average of four exceptional observations, S. and W. S. 31° West.
Average of ten observations to the East of South, S. 22 4-10° East.

GEAUGA COUNTY—

Thompson.....S. 40° and 50° West, and 50° East.
Hampden.....S. 10° and 15° East.
Chardon.....S. 10° East,
Chester.....S. 50° and 70° East.
Russell.....S. 50° and 70° East.
Bainbridge.....S. 40° East.
Parkman.....S. 30° West.

LAKE COUNTY—

Leroy.....S. 45° West.

PORTAGE COUNTY—

Mantua.....	S. 30° and 40° East.
Four observations W. of South.....	Mean S. 41° West.
Ten observations E. of South.....	S. 37 4-10° East.

CUYAHOGA COUNTY—

Solon.....	S. 45° East.
Euclid.....	S. 20° and 25° East.
Independence.....	S. 20° East.
Average.....	S. 27 1-2° East.

SUMMIT COUNTY—

Portage near Akron.....	S. 10° to 35° East.
N. Hampton.....	S. 30° to 60° East.
N. Hampton.....	S. 30° and 35° East.
Middlebury, exceptional.....	East and West.
Tallmadge Coal Hill.....	S. 30° and 40° East.
Cuyahoga Falls.....	S. 45° East.
Twinsbury.....	S. 40° and 45° East.

MEDINA COUNTY—

Copley.....	S. 30° West.
Sharon.....	S. 40° East.

WAYNE COUNTY—

Doylestown.....	West and South.
Average, not anomalous.....	S. 36 6-10° East.

WEST END OF LAKE ERIE.

Between Buffalo at the East end of this Lake, and the Islands, the rocks near the water-level are generally too soft to retain the ancient ice-markings. On the lime rock at Buffalo, there are numerous and distinct etchings, that bear from South 25° to South 30° West, and run under water. Their bearings are nearly parallel with the axis of the trough of the Lake. At the mouth of Detroit River, near Gibraltar, the limestone beds are grooved and polished, and the bearings are also South 30° West. The Islands, and the limestone shores to the South and West, are everywhere scoured and grooved in the same way; but the bearing is generally more to the West, differing by nearly a right angle with the general bearing in the Northeastern Counties.

KELLEY'S ISLAND AND ADJACENT—

Southeast corner, at water level, long grooves.....	S. 75° West.
Southeast corner, cross striæ.....	N. 80° West.
Culkins' Quarry, north side, deep grooves.....	S. 80° West.

KELLEY'S ISLAND AND ADJACENT—*Continued*—

Calkins' Quarry, striæ	S. 70° West.
Calkins' Quarry, water level, striæ	N. 80° West.
Calkins' Quarry, one heavy groove	S. 45° West.
Calkins' Quarry, one striæ	S. 60° West.
Mean of twelve observations in different parts of Island, S.	80° West.
West Sister Island, mean	S. 80° West.
Put-in-Bay, mean of twenty observations	S. 80° West.
Sandusky City, mean of four observations	S. 78° West.
Sandusky City, mean of two observations	S. 80° West.
Sandusky City, mean of one observation	S. 81° West.

ERIE COUNTY—

Belleville	S. 75° West.
Belleville	S. 65° West.

OTTAWA COUNTY—

Geneva	S. 65° West.
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LUCAS COUNTY—

Sylvanus, five observations	S. 50° West.
Monclova, four observations	S. 62° West.
Whitehouse	S. 50° West.
Near Maumee River, seven observations	S. 62° West.

WOOD COUNTY—

Portage, three observations	S. 50° West.
Otsego, three observations	S. 64° West.
Defiance	S. 45° West.

PAULDING COUNTY—

Junction, three observations	S. 45° West.
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VAN WERT COUNTY—

Middlepoint, two observations	S. 15° West.
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HANCOCK COUNTY—

Findlay, three observations	S. 43° West.
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PUTNAM COUNTY—

Blanchard	S. 20° West.
Sugar Creek	S. 50° West.

AUGLAIZE COUNTY—

Auglaize	S. 48° West.
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SENECA COUNTY—

Seneca.....	S. 5° East.
Seneca.....	S. 23° West.

WYANDOTTE COUNTY—

Crawford.....	S. 20° West.
Crane.....	S. 5° West.
Marseilles.....	S. 10° West

MARION COUNTY—

Grand Prairie.....	North and South.
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MIAMI COUNTY—

Troy.....	Glaciated surface: bearings not given.
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HIGHLAND COUNTY—

Near Lexington, according to Professor Orton, very marked roches moutonnees. Dr. John Locke, in the Second Report of the First Geological Survey, 1838, page 230, has given a *fac simile* of polished limestone from Light's quarry, near Dayton, Montgomery County. It was done by placing a surface block in a ruling machine, by which it engraved itself to perfection. The grooves are from the 1-40 to the $\frac{1}{2}$ of an inch deep, and from a line to $\frac{1}{2}$ of an inch wide. Both the grooves and the finer striæ are in groups, or fascicles, as high as ten in number. They were perfectly straight, and covered by two feet of earth. The average bearing is about S. 26° East, ranging from 19° to 21°, 31° and 33°; but the greater number of the most pronounced are S. 26° East.

The above abstract is compiled from the observations of Professors Newberry, Read, Winchell, and Gilbert of the Second Ohio Survey, and from those of Colonel Whittlesey. Most of the irregular and exceptional bearings can be accounted for by the local topography turning aside the general movement. The highest elevations are 625 to 650 feet above the Lake, above which the ice sheet must have risen several hundred feet.

EFFECTS OF THE GLACIAL DAM AT CINCINNATI ALONG THE UPPER BASIN OF THE OHIO.

BY PROFESSOR I. C. WHITE,
OF THE PENNSYLVANIA GEOLOGICAL SURVEY.

Among the papers read before the geological section at the recent meeting of the American Association for the Advancement of Science at Minneapolis, 1883, was the following by Professor I. C. White, of the University of West Virginia, on the *Glacial Dam* at Cincinnati, and the evidences of the West Virginia portion of the vast lake made by that dam :

"In a paper read before the Boston Society of Natural History, March 7, 1883, Rev. G. F. Wright has shown that the southern rim of the great northern ice-sheet crossed the Ohio River, near the site of New Richmond, a few miles above Cincinnati. Mr. Wright believes that one effect of this invasion of the Ohio Valley by the glacial ice, was to form an immense dam of ice and morainic *debris* 500 or 600 feet high, which, effectually closed the old channel way, and set back the water of the Ohio and its tributaries, until rising to the level of the Licking River divide, it probably found an outlet through Kentucky around the glacial dam. As this divide is 500 or 600 feet higher than the present bed of the Ohio at Cincinnati, Mr. Wright states that the site of Pittsburgh would have been submerged to the depth of 300 feet, and adds: It remains to be seen how much light this may shed upon the terraces which mark the Ohio and its tributaries in Western Pennsylvania.

"Having resided for nearly a score of years in the valley of the Monongahela River, the writer is necessarily familiar with its terraces and surface deposits in general ; and in reply to the above query of the eminent glacialist, would answer that his admirable work throws a flood of light upon the Monongahela terraces, and proffers for them and the deposits along other tributaries of the Ohio, the only satisfactory explanation that has ever been advanced.

"Of course, if the Ohio River was ever so obstructed for any considerable period of time, it would follow, as a necessary result, that many of the tributary streams and the Ohio itself above the limit of the dam,

would have their old valleys silted up with vast heaps of trash—clay, sand, gravel, boulders, drifted logs and other rubbish—carried down by the streams from the region not sheeted with ice, and dumped into the great inland lake stream which extended from Cincinnati far up toward the sources of the Monongahela.

“That the valley of the latter stream has been refilled with trash during some period of its history to a height of 250 or 300 feet above its present bed, the evidence is most conclusive, for the remnants of this deposit still cover the surface to a great depth in long lines of terraces extending from Pittsburgh, Pa., southward along the river to Fairmount, W. Va., a distance of 130 miles, and very probably much further, as I have never examined the river valley above the latter town.

“The striking peculiarity of these terrace deposits is that they suddenly disappear at an elevation of 1050 or 1075 feet above tide, not a single rounded and transported boulder ever being found above the latter horizon, though occurring in countless numbers below this level.

“The hills along the river often rise 300 or 400 feet higher than the upper limit of the deposits, so that there can be no mistake about the elevation at which the terrace deposits disappear. The composition of these great heaps of surface *debris* is, along the immediate valley of the river, a heterogeneous mixture of sand, clay, gravel, rounded boulders of sandstone of every size, from an inch in diameter up to four feet, pieces of coal, leaves, logs of wood, and every other species of rubbish usually transported by streams. Back from the channel of the river, however, and especially where the surface configuration would make quiet water, there occur thick deposits of very fine, bluish white clay, in which great numbers of leaves are most beautifully preserved. These clays have been extensively used for the manufacture of pottery at Geneva and Greensboro, Pa., and also to some extent at Morgantown and Fairmount, W. Va. Though the clay deposits occur at nearly every horizon, they are purest near the upper limit of the terraces, and these are consequently the only ones that have hitherto been much explored.

“In the vicinity of Morgantown, terraces of transported material occur at the following approximate (measured by barometer) elevations :

	Ft. above river.	Ft. above tide.
First Terrace.....	30	820
Second Terrace.....	75	865
Third Terrace.....	175	965
Fourth Terrace.....	200	990
Fifth Terrace.....	275	1065

“The first terrace is the present flood-plain of the river, consisting principally of fine sand, mud and gravel. It seems to possess some respect-

able antiquity, however, since Mr. Walter Hough, one of my students, dug some teeth and bones from five feet below its top, which were identified by Professor O. C. Marsh, as the remains of a species of peccary, an animal that has not inhabited the region in question within the American historic epoch.

"All of the other terraces have thick deposits of transported material, wherever the original contour of the surface has favored its preservation from erosion. From the top of the fourth terrace Mr. Keck dug a well through 70 feet of clay, gravel and boulders without finding bed rock. He also encountered logs of wood in a soft or semi-rotten condition near the bottom.

"Many other wells on the third terrace have been sunk to depths of 20 and 30 feet without reaching bed rock.

"The fifth terrace of this Morgantown series marks the height to which the pre-glacial valley of the Monongahela was silted up, partially or entirely during the existence of the glacial dam at Cincinnati, since, as already stated, no clay beds, rounded boulders, or other transported material are ever found above its top, but instead only angular fragments of the country rock, and thin coverings of surface material which has accumulated *in situ*.

"Owing to the considerable elevation—275 feet—of the fifth terrace above the present river bed, its deposits are frequently found far inland from the Monongahela, on tributary streams. A very extensive deposit of this kind occurs on a tributary one mile and a half northeast of Morgantown, and the region, which includes three or four square miles, is significantly known as the 'flats.' The elevation of the 'flats' is 275 feet above the river, or 1065 feet above tide. The deposits on this area consist almost entirely of clays and fine sandy material, there being very few boulders intermingled. The depth of the deposit is unknown, since a well sunk on the land of Mr. Baker passed through alternate beds of clay, fine sand, and muddy trash to a depth of 65 feet without reaching bed rock. In some portions of the clays which make up this deposit, the leaves of our common forest trees are found most beautifully preserved. Whether or not they show any variations from the species growing in that region, the writer has not yet had time to determine, but when a larger collection has been obtained, this subject will receive the attention that it deserves, since if the date of the glacial epoch be very remote, the species must necessarily show some divergence from the present flora.

"Of animal remains the only fragment yet discovered in this highest of the terraces is the tooth of a mastodon, dug up near Stewartstown, seven miles northeast from Morgantown.

"The other tributaries of the Monongahela, on which the writer has noted the clay and other deposits of the fifth terrace, are Decker, Dunkard, Whitely, Muddy, and Ten Mile creeks, and in each case the depos-

its disappear at the same absolute level at which they cease along the river.

"The Great Kanawha River, another principal tributary of the Ohio, draining a region that was never glaciated, also exhibits water-worn boulder deposits which disappear at 200 to 300 feet above the present level of that stream, though I have not determined the exact limit.

"The glacial dam at Cincinnati presents a complete explanation for the origin of Teazes valley, an ancient, deserted river channel 20 miles long and one or two miles wide, which leaves the Great Kanawha 15 miles below Charleston, W. Va., at Scary, and passing through Putnam and Cabell counties, extends to the valley of Mud River, a tributary of the Guyandotte, which empties into the Ohio at Huntington.

"This valley, although having an elevation of 200 feet or more above the Kanawha, is filled to a great depth with rounded boulders of sandstone, chert, cannel coal, and other trash, which has plainly been transported down the Kanawha from above Charleston, so that although it was clearly seen that the water of the Kanawha had once found an outlet to the Ohio by way of this valley and the Mud and Guyandotte rivers, yet why this ancient channel should have been abandoned for the present much more circuitous one had always remained a mystery until Mr. Wright furnished the key in the discovery of the great ice dam at Cincinnati. For it is now clear that such a barrier would set back the water of the Kanawha, until rising above the divide which had previously separated it from Mud River, it sent an arm across to the Ohio by way of the Guyandotte 50 miles below where the other arm and main stream reached the same river at the present mouth of the Kanawha, thus converting portions of Putnam, Mason and Cabell counties into a large, triangular island, the base of which was formed by the swollen Ohio, and the sides by the two arms of the Great Kanawha. The melting away of the Cincinnati dam withdrew the water from the western or Mud-Guyandotte arm of the Kanawha, leaving the abandoned valley high and dry, but littered up with transported trash, as we now see it, while the Kanawha continued on to the Ohio in its present and pre-glacial outlet.

"A summary view of these and other facts in the writer's possession seems to prove, beyond any reasonable doubt, that Mr. Wright's hypothesis concerning the damming up of the Ohio by the glacial ice in the region of Cincinnati was an actual reality; that during the period of its continuance the principal tributaries of the Ohio had their valleys filled with sediment carried down and dumped into them by the mountain torrents, and other streams which drained the area south from the glaciated region; that subsequently, when the barrier disappeared, the rivers recut their channels through the silt deposits, probably by spasmodic lowering of the dam, in such a manner as to leave the deposits in

a series of more or less regular terraces, which, in favored localities, subsequent erosion has failed to obliterate, though from steep slopes it has removed their every trace.

"The elevation of this dam at Cincinnati, as determined from the upper limit of the fifth Monongahela river terrace, would be somewhere between 1050 feet and 1075 feet above tide, or about 625 feet above low water there in the present Ohio."

Professor White has still more recently (see *The Virginias* for Sept., 1883,) called attention to additional and confirmatory evidence, consisting of small, rounded boulders on the summit of the knob in Sistersville, Tyler county, West Virginia, between five hundred and six hundred feet above the river.

Certain phenomena in Boyd county, Ky., which had been referred to as evidence of direct glacial action I found on examination to be also natural results of the supposed ice dam.

Boyd county is in Northeastern Kentucky, bordering upon West Virginia, and upon the remarkable bend of the Ohio River where it receives the waters of the Big Sandy. Through the attention of Mr. John Campbell of Ironton, O., and Mr. J. H. Means of Ashland, Ky., I was assisted in making a pretty thorough examination of the region. Upon going back about two miles into Kentucky from the Ohio River, opposite Ironton, we find ourselves in a valley two miles wide, running parallel with the Ohio River, and two hundred and twenty feet above it. This valley extends for many miles, reaching the river towards the west at Greenup, and continuing some miles, at least, above Ashland. It is known as Flat Woods. The level is remarkably uniform; and the hills upon either side of it rise about two hundred feet, with numerous lateral openings toward the Ohio. When upon the farther side, and looking northward, one sees the rocky bluffs of the old channel rising so like those facing the river itself that he can scarcely resist the illusion that he is in the present valley of the stream. The supposed glacial phenomena consist of numerous water-worn pebbles of quartz and quartzite scattered along the whole range of this old valley. Most of the pebbles are small, and perfectly rounded, though some were a foot or more in diameter; and one observed was about two feet and a half through, and only slightly worn. These pebbles are not found upon the hills back from this channel, on the Kentucky side, nor, according to Mr. Campbell, who is a most competent witness, anywhere in Lawrence county, O., back from the river. Plainly enough they are the result of water-transportation. Whether they were deposited at the very early period when the Ohio flowed at the level of two hundred and twenty feet higher than now, and regularly occupied this old channel, or whether they were brought into place during the existence of the glacial dam which I have supposed at Cincinnati, I will not venture to say; though the latter theory would seem more in accordance with the facts

published by Professor White concerning the old channel followed by the Chesapeake and Ohio railroad, extending from the Kanawha River to the mouth of the Guyandotte in West Virginia. The elevation of the Kanawha-Guyandotte channel is nearly the same as that of the one I am describing, and this seems to be a prolongation of that. At any rate, the pebbles can only be indirectly referred to glacial action, and would be a very natural result of my theoretical ice dam at Cincinnati.

In *Science* for Sept. 28, 1883, Mr. G. H. Squier describes some phenomena observed by him in the valley of the Licking and its larger tributaries in Kentucky which had independently, though on less direct evidence, led him to the same conclusions with myself as to the existence of an ice dam near Cincinnati. Mr. Squier has kindly furnished me in a private letter many additional facts for which I gladly give him credit.

In Bath county he found over an extensive region of low table land, between Slate Creek and Licking River, and for some distance to the north, large numbers of water-worn pebbles, composed of white quartz chert, black shale and sandstone, and most remarkable of all, fragments of water-worn coal. These are spread not only over the low table land and in the valleys, but over the lower hills; but do not extend vertically as high as the watershed. The pebbles of sandstone and coal must have been brought down the streams at least twenty miles, and it is evident that they could not have been left upon this table land and these low hills by running water. The Cincinnati ice dam supposed would furnish the required conditions by making a temporary lake into which floating ice from the east could bring and deposit the materials in the situations indicated. To use Mr. Squier's own words, "The general level of the area near the junction of Slate Creek and Licking River is so low that, save a few hills, it must have all been overflowed [during the existence of such an ice dam] and the great body of floating ice from above must, of necessity, have passed directly across it. "So strongly did the above facts point to a temporary damming of the river, that even in the face of what I regarded as improbable I was led to the conclusion that the glacier must have crossed the Ohio."

In the same number of *Science* (Sept. 28) Professor Lesley publishes a letter in which he speaks of this dam as "furnishing precisely the explanation we need for the *local drift* terraces of the Monongahela and the *rolled northern drift* terraces of the lower Allegheny, Beaver, and upper Ohio rivers."

WESTERN RESERVE

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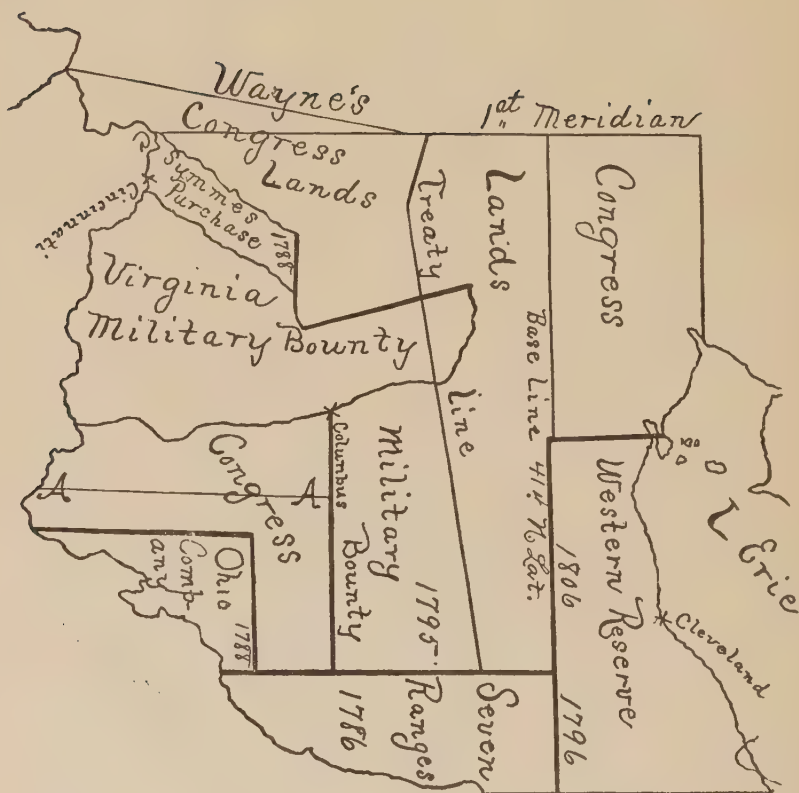
SURVEYS OF THE PUBLIC LANDS IN OHIO.

BY

COL. CHARLES WHITTLESEY.

JULY, 1884.

CLEVELAND, O.:
WILLIAM W. WILLIAMS, 145 ST. CLAIR STREET,
1884.



The surveys of the Government lands were commenced in July 1786, under the management of Thomas Hutchins, the geographer of the United States. There were surveyors appointed, one from each State ; but only nine entered upon the work in 1786. Among them were Anselm Tupper, Joseph Buell and John Matthews. Rufus Putnam was appointed from Massachusetts, but was then engaged in surveys in what is now the State of Maine.

The geographer planted his Jacobstaff on the Pennsylvania line at the north bank of the Ohio River. Having been one of the Pennsylvania commissioners on the western boundary in 1784, he was familiar with the country from the Ohio River to Lake Erie. He ran a line west over the hills of Columbiana and Carroll counties in person ; now known as the Geographer's Line, a distance of 42 miles. At each mile a post was set and on each side witness trees were marked. Every six miles was a town corner. From these corners surveyors ran the meridian or range lines *south* to the Ohio, and the east and west town lines.

Hutchins began the numbers of the sections, or number one at the southeast corner of the township, thence north to the northeast corner. The next tier began with No. 7 on the south line, and so on, terminating with No. 36 at the northwest corner. This system of numbering was followed in the survey of the Ohio company's purchase and in the Symmes purchase. It was changed to the present system by the act of 1799, without any apparent reason. The towns in the seven ranges were, by law, numbered from the Ohio River northward, and the ranges from the Pennsylvania line west-

ward. In the history of land surveys this is the first application of the *rectangular system* of lots in squares of one mile, *with meridian lines*, and corner posts at each mile where the number of the *section, town and range* was put on the witness trees in letters and figures. It should be regarded as one of the great American inventions. The law of 1785 embraced most of the details of the new system. It was afterwards adopted by the State of Massachusetts in the surveys of her timber lands in the province of Maine, and by the purchasers of her lands within the State of New York, also by the managers of the Holland purchase in western New York and the State of Connecticut on the Western Reserve.

Although the Indian tribes had ceded Southern Ohio to the United States, they were bitterly opposed to its survey and settlement by white people. They were so hostile that troops were detailed from Fort Harmar for the protection of surveyors. The geographer's line ended on the heights south of *Sandyville*, in Stark county, about three miles east of Bolivar. In September 1786, *Major Doughty*, of Col. Harmar's Battalion, advised them that he could not guaranty their safety. The subdivision of very few townships was completed that year. In 1787 the work was pushed more rapidly. The west line of the seven ranges, as they have ever since been designated, was continued southward to the Ohio River, a few miles above Marietta, being about fourteen (14) towns or 84 miles in length.

The meridian lines of the seven ranges diverged to the right, or to the west, as they were extended southerly. The magnetic variation was seldom corrected. The country was rough and revengeful savages lurked in the surrounding forest. The work of these brave men

should not be closely criticized, even where there are some irregularities.

The variation of the needle in 1786 must have been about (2) two degrees east, decreasing about (2' 30'') two and one-half minutes yearly. If the magnetic meridian was followed, the result would be a deviation from the true meridian, and going south would be to the west and the departure would be *16 chains 80 links* for each township. No account was then taken of the divergence of meridians, which in working southward amounted in a degree of 69½ miles to about eight chains. Not less than an entire section was offered for sale, and the price was two dollars per acre. Supplies were brought to the lines from Fort Stuben (now Steubenville) through the woods on pack horses. By the act of May 18, 1796, the tract north of the Geographer's line to the Western Reserve was directed to be surveyed, but it was not until 1810 that the section lines were closed up to that line.

A discussion having arisen between the Connecticut Land Company and the Federal Government, as to the location of the 41st parallel of latitude, Surveyor Gen. Professor Manfield, was directed to examine the line, in that year, who advised that it be not disturbed.

After the death of Geographer Hutchins, in April 1789, the entire management of the surveys, devolved upon the Board of the Treasury, until the constitution of 1787 went into operation, and for some years after. Before the constitution there was no Federal executive, or cabinet, and executive business was transacted by committees, or boards filled by members of congress, subject to the direction of Congress. Legislation was a very simple matter. A convention of delegates from the several States, in such numbers as they chose to

select and to pay, each State having one vote, constituted the supreme power. Their legislative acts took the form of resolutions and ordinances, which were final. As early as August 1776, it was resolved to give bounties in land, to soldiers and officers in the war of liberation. A tract was directed to be surveyed for this purpose in Ohio, in 1796. It is still known as the "*Military bounty lands*," lying next west of the seven ranges, fifty miles down the line to the south, bounded north by the treaty line of 1795, and extending west to the Scioto river. Its southwest corner is near Columbus. For this tract the surveyors were able to bring supplies up the Muskingum and the Scioto rivers in boats. In the bounty lands the townships were directed to be *five* miles square, with subdivisions into quarters, containing 4,000 acres. The allotment of the quarter towns was left to the owners.

It was not until 1799 that the surveys were again placed in charge of a special officer, with the title of *surveyor general*.

Gen. Rufus Putnam, of Marietta, was appointed to the place, which he held until the State of Ohio was admitted into the Union. Putnam was a self-taught mathematician, surveyor and engineer, on whom Washington relied for the construction of the lines, investing the city of Boston in 1775-1776.* He comprehended at once the rectangular system of surveys, and so did the surveyors of the New England States. He served until the State of Ohio was organized in 1803 and was succeeded by Jared Mansfield of the United States Military Engineers. Both these gentlemen were for their times accomplished mathematicians and engineers.

The sale of lands in the seven ranges was so slow, that there was for several years no necessity for additional surveys. At two dollars per acre, and in tracts of not less than a section of 640 acres, the western emigrant

could do better in other parts of Ohio and in Kentucky. The purchasers of the Symmes purchase paid for the entire tract sixty-seven cents per acre. On the Reserve the State of Connecticut offered her lands at fifty cents.

In the Virginia military reservation, the whole was available in State warrants that were very cheap. The Ohio Company paid principally in continental certificates.

After 1796 the military bounty land came in competition, which could be had in tracts of four thousand acres for bounty certificates, issued under the resolutions of 1776 and 1780. In 1795 the Western Reserve was sold in a body at about forty cents per acre. These large blocks covered full half of the State of Ohio.

By the act of May 18, 1796, additional surveys were provided for. *First:* In the district between the Ohio Company and the Scioto River. Here it was found that a correctional meridian was necessary, because of the excess in the sections, abutting on the west line of the Company at range fifteen.* The correction was made by establishing a true meridian between ranges 17 and 18 with sections of an exact mile square. Between the Ohio River and Hampden, in Vinton county, the correction north and south amounted to a mile. The errors from the variation of the needle were such that quarter sections abutting on the true meridian on the east, were nearly as large as full sections on the west.

There are also discrepancies on the north line of the Ohio Company, especially between Hocking and Perry counties. On the south side the sections overrun in some instances, twenty acres. On the north, the government surveys are sometimes short 25 to 28 acres. On the county maps in the Symmes purchase, the section lines present a singular appearance. Their east and west boundaries are the most irregular especially in the later surveys. This difference is due not so much to the compass as the chain, and the allowance for rough ground. Land was of so little value that very little care was given to the accuracy of surveys.

Secondly: By the same act, seven ranges were to be

* See line A A of plan.

surveyed on the Ohio River, next west of the first meridian now in Indiana; also in the country between this meridian and the Great Miami. In both tracts, the towns were numbered from the river northward. Quarter posts were required at each half mile, and the land was offered in half sections, to be divided by the purchaser, the price remaining at two dollars per acre.

It was not until after the war of 1812-15, and the conquest of the Indian territory north of Wayne's treaty line that surveys were ordered in the north-west quarter of Ohio. For this tract a base line was run on or near the 41st parallel of latitude, corresponding to the south line of the Reserve. The ranges were numbered east from the first meridian, being the west line of Ohio, and the towns numbered north and south from the base. It is seventeen ranges east to the west line of the Reserve, and from the Pennsylvania line twenty-one ranges west, making the breadth of the State about two hundred and twenty-eight miles.

From 1779 to 1785 parties holding Virginia State land warrants located them on the north side of the Ohio. This was done against the law of Virginia and her cession of 1784. The valley of the Hocking River was occupied as far as Logan, when, in the fall of 1785, the claimants were removed by the United States troops. Probably these claims had been surveyed. In the Virginia military tract the private surveys were so loose as to be entirely useless for geographical purposes. In order to fix the Little Miami River on the official maps, an east and west line was run from near Chillicothe through the reservation, connecting the United States surveys from the Scioto River to the Little Miami. According to the present practice there are corrective lines and guide meridians within 30 to 50 miles of each other. The towns and sections are thus made nearly equal by these frequent checks upon errors of chaining, of the variation of the needle, and the convergence of meridians. It was not until 1804 that sales were made in quarter sections, and it was 1820 before the price was fixed at \$1.25 per acre, which could be located in half or quarter sections as it has been ever since.

— THE —

CORPORATE BIRTH AND GROWTH

OF THE

CITY OF CLEVELAND.

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AN ADDRESS

TO THE

EARLY SETTLERS' ASSOCIATION OF CLEVELAND, DELIVERED
JULY 22, 1884,

By S. O. GRISWOLD, Esq.

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THE CORPORATE BIRTH AND GROWTH

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CITY OF CLEVELAND.

AN ADDRESS TO THE EARLY SETTLERS' ASSOCIATION
OF CLEVELAND, DELIVERED JULY 22d, 1884,
By S. O. GRISWOLD, Esq.

LADIES AND GENTLEMEN OF THE EARLY SETTLERS ASSOCIATION:—

At the request of your worthy President I appear before you to deliver your fifth annual address. While I cannot pretend to bring to you anything of personal recollection of the early days, my line of study has made me familiar with some matters which may be appropriately considered on this occasion. The authorities for the facts to be stated by me are in great part derived from the archives of the State, and the public records of the County and City, which I have verified by personal inspection. I must also acknowledge my obligation for other facts to that most excellent compilation in regard to the history of Cleveland by our distinguished fellow townsman, Col. Charles Whittlesey. The subject which I have chosen for my address is: *The Corporate Birth and Growth of the City of Cleveland.*

This place, where the Cuyahoga river empties into Lake Erie, was regarded by the statesmen of the ante-revolutionary period as a strategic point for the command of the northwest territory, and the control of the future commerce of the lakes. Immediately after the ratification of the treaty of peace in 1784, the Continental Congress by resolutions passed the 23rd day of April of that year, assumed the control of this vast territory, and on May 25th, 1785, it passed an ordinance for the survey and sale of the land thereof. There then existed, however, on the part of several of the States, conflicting claims in regard to their jurisdiction and ownership of

the title to this region. The State of Connecticut made large claims to the territory; but on the 14th of September 1786, that State ceded to the Continental Congress all its rights over this region, reserving, however, the title to all the land bounded south by the 41st parallel of north latitude, and north by the line of $42^{\circ} 1'$, and extending west between these lines from the Pennsylvania line, a distance of 120 statute miles.

On the 13th day of July 1787, the Continental Congress passed an ordinance for the government of this territory of the United States northwest of the Ohio river, which is known as the famous ordinance of 1787. In the fifth article of that ordinance, it was provided that not less than three nor more than five States might be formed out of this territory, and the western line of the eastern State thereof was coincident with the present western boundary of Ohio, said line beginning in the Ohio river at the mouth of the great Miami, and drawn due north to the territorial line between the United States and Canada.

A territorial government was immediately organized, and General Arthur St. Clair was appointed governor, and continued to hold the office till Ohio was admitted into the Union. On the 12th of July 1788, the governor, by his proclamation, established Washington County, including all the State east of a line from the mouth of the Cuyahoga river to the Ohio river, and on the 29th day of July 1797 he established the County of Jefferson, which included all the northern part of said Washington County. Although the Continental Congress, by its resolutions and ordinances, assumed jurisdiction over all this territory northwest of the Ohio river, the State of Connecticut yielded none of its claims to this reserved tract, described in its act of session of 1786, and proceeded to deal with it as its own rightful territory, and, as is well known, granted the title to the soil thereof to the Connecticut Land Company. The few scattered inhabitants of this district paid little heed to the assumption of jurisdiction by the territorial governor; they laughed to scorn the tax gatherer sent among them, and he returned to his county seat with his pockets leaner than when he started from home. The spirit of those early emigrants is well portrayed by the conduct of the surveying party sent out by the Connecticut

Land Company to survey this territory after the conveyance to it by the State of Connecticut. They arrived at the western boundary of Pennsylvania and established the point where the dividing line struck the lake, on the 4th of July 1796, and having performed this work, proceeded on that day, as was the custom of the whole country, to have a Fourth of July celebration, with federal salutes, dinner, toasts and speeches; and the second toast on that occasion was the State of New-Connecticut, which was drank with well filled bumpers of good old-fashioned grog. They were actuated by the same sentiments and feelings as were their ancestors more than 150 years before, who, finding themselves gathered on the banks of the Connecticut river, and feeling the necessity of an established government, without any permission or authority of king, parliament, royal council, or colonial assembly, adopted a written constitution, the first known in all history, where the ultimate authority was based on the major vote of the people, and under that constitution established a government, and entitled it, "The Commonwealth of Connecticut."

The disputes, however, as to the jurisdiction of this territory, were settled in a wise and prudent manner; the first Congress of the United States, at its first session, passed an act, approved August 7th, 1784, ratifying the ordinance of 1787, and continuing in force the territorial government, and by an act passed at the first session of the sixth Congress, approved April 28, 1800, authorized the President of the United States to accept for the general government the session of jurisdiction of this territory west of Pennsylvania, commonly called the Western Reserve of Connecticut, and by said act confirmed the title to the soil in the State of Connecticut, and authorized and directed the President to issue a patent to the Governor of that State for the territory embraced within the boundaries aforesaid. On the 10th of July following, the Governor of the territory, by his proclamation, established the county of Trumbull, which substantially embraced within its limits all of said reserved tract. The Connecticut Land Company after its purchase took immediate steps to have its land surveyed, and in 1796 sent out a surveying party, at whose head was General Moses Cleaveland, to perform the work. As before

stated, this party arrived and established at the lake a point in the line of the boundary between this reserved tract and the State of Pennsylvania. It does not fall within my purpose to give any history of that survey, and I refer to it only in connection with the laying out of this city. The plan of the survey was first to establish the dividing line between the tract and Pennsylvania, then to establish the southern boundary line, being the 41st parallel of north latitude, then to lay off on this line ranges of townships containing 25 square miles, the ranges numbering upwards westwardly, and the townships northwardly. That portion of the surveying party, whose duty was to run the southern boundary, having proceeded on that line sixty miles westwardly, being the west line of the 12th range, then ran the west line thereof north to the lake, and arrived here at Cleveland on the 22d day of July, 1796, where nearly the whole party were reunited, and furnished with supplies, which they greatly needed. You have well chosen this same day of the month as your anniversary day. When this party running the west line had arrived at the north line of the sixth township of the 12th range (Independence), they found the course of the Cuyahoga River, which passed centrally through that township, then bore substantially a due northerly course to the lake, and in accordance with instructions of the Company, the west line of this range was not further prolonged on its course, but they went eastwardly to the river for the rest of the distance, making the Cuyahoga River the west boundary to the lake, and the next township, which was Cleveland, therefore, according to the survey, became the seventh township of the twelfth range, although a small strip near the lake was on the line of the townships numbered eight. When General Cleaveland examined the situation, with the prescience of a leader of men, he saw that this plateau at the junction of the river and the lake was the true site for a city, and he directed his surveyors to lay out here a plot for the same. In his judgment here was to be the capital of the State of New-Connecticut, which was to arise and grow on this reserved wilderness. The actual surveying work was done under the direction of Augustus Porter, assisted by Seth Pease and Amos Spafford as principal surveyors. The area selected contained

about 520 acres, and was divided into two acre lots, 220 in number, with streets, alleys, and public grounds. There was first made a rough field map on which these lots, streets, and grounds were marked and laid out, but a more perfect and complete map was made by Seth Pease and finished before the 1st of October of that year. On this old field map, there was written in fair hand, as well to perpetuate the General's memory, as the event itself, "The City of Cleveland." In the spelling, the letter "a" in the first syllable always used by the General himself, was omitted, which letter was not used in the English District of that name, called by the old Saxon invaders *Clif-londe*, which was the origin of the cognomen, and it has generally been omitted by the family to which the General belonged. There was a resurvey of the plot by Major Spafford in 1801, who had assisted in the original survey. The clearing away of the forest and other causes had destroyed many of the posts and monuments originally set and marked, but he had before him the original minutes and survey, and no substantial change was made by him in the lots or streets.

The streets as copied from Pease's notes and minutes are as follows :

First, *Superior street*, north side beginning at the west end, where it connects with Water street at a post (from said post, a white oak marked D bears S 31° E dist. 21 links). Thence runs N 56° E (counting from the true meridian) 20 chains to the Square. Thence keeping the same course across the Square to a corner post on the other side of the Square 9 chains 50 links (from the last post a white oak marked F bears N 25° west 24 links dist). Thence N 56° E 20 chains to the west side of Erie street to a corner post, from which W oak marked R bears S 82° W dist. 46 links.

N. B. This street is 200 links in width.

Survey of *Lake street* north side, beginning at the west end at Water street at a corner post, (from which a whitewood tree marked H bears S 31° E dist. 31 links). Thence runs N 56° E 24 chains to the west side of Ontario street to a corner post, from which a black oak marked J bears N 42° E distant 38 links. Thence across sd. street 150 links to a post, from which a white oak marked K bears N 22° W distant 24 links. Thence to the west side of Erie street

24 chains to a corner post from which a white oak marked N bears 69° W 45 links distant. This street is 150 links in width.

Federal street is parallel to Superior street. The south side of Federal street is half way from Superior street to Lake street; it begins on Erie street and runs 56° E to the east line of the city limits. Its length is 1800 links, and its width 150 links.

A description of *Huron street*. It is parallel to Superior street, and distant from it 20 chains. Its width is 150 links, its length from the east line of the city to Erie is 18 chains; afterwards there was a triangular piece taken off from lot No. 97 to connect sd. with Ontario above the bank. The north side of Huron from Ontario to the river is 745 links. The south side of Huron street to Miami is 16 chains, and from Miami street to the river 12 chains 50 links.

Ohio street is parallel to Huron street, and is distant from it 20 chains. The whole length is from Miami street to Erie street 16 chains; its width is 150 links or 6 rods.

The description of *Erie street*. East side. The distance from the south line of the city limits to Huron street is 31 chains 50 links, and from Huron street to Federal street to the top of the bank of the lake shore is 17 chains 25 links. West side. The distance from the south line of the city to Ohio street 10 chains; from Ohio street to Huron street is 20 chains; from Huron street to Superior street is 20 chains; from Superior street to Lake street is 20 chains 3 links; from Lake street to the top of the banks of the lake shore is 708 links; below the banks not measured. This street lieth at right angles with Superior street. That is N 34° W or S 34° E. The whole length from the south line of the city to the top of the bank of the Lake is 83 chains 68 links. The width of the street is 150 links.

Ontario street. East side from Huron street to the Square is 14 chains; from the Square to Lake street is 16 chains; from Lake street to the top of the bank of the Lake shore is 7 chains. West side from Huron street to Maiden Lane is 8 chains 55 links; from Maiden Lane to the Square is 6 chains 70 links; from the Square to Lake street is 16 chains; from Lake street to the top of the bank of the Lake shore is 7 chains 62 links. The course of Ohio street is N 34° W or S 34° E and 150 links in width.

Miami street connects the west end of Ohio street with Huron street and is parallel to Erie street. The length is 20 chains, and its width 150 links.

Water street. East side from Superior street to Lake street is 20 chains: from Lake street to the top of the bank of the Lake shore is 8 chains 50 links. West side, from Superior street to Mandrake Lane is 15 chains: from Mandrake Lane to Bath street is 13 chains 12 links. The width is 150 links. Its course is $N 34^{\circ} W$ or $S 34^{\circ} E$.

Survey of *Mandrake Lane.* West side beginning at Water street, and run by lot No. 197 $S 59^{\circ} W$ 5 chains 72 links: thence $S 6^{\circ} E$ 5 chains 61 links to Union street. South east side beginning at Water street and run $S 56^{\circ} W$ 5 chains 18 links. Thence $S 6^{\circ} E$ 484 links to Union Lane. The width of the street is 100 links.

Survey of *Union Lane.* North side beginning at the south end of Water street west side and run $N 80^{\circ} 40' W$ 316 links to a post: thence $N 56^{\circ} 50' W$ 863 links to a post: thence $S 77^{\circ} 20' W$ 200 links to a post, where it connects with Mandrake Lane, thence $S 77^{\circ} 20' W$ across the end of Mandrake Lane 191 links. Thence $S 56^{\circ} W$ 167 links to the river. The width of this Lane is 100 links.

Survey of *Vineyard Lane.* West side beginning at an angle formed by the continuation of Water street west side and Superior street south side: thence running $S 5^{\circ} 20' W$ 435 links to a white oak; thence $S 24^{\circ} W$ 12 chains to a post: thence $S 56^{\circ} E$ 128 links to the river.

N. B. The road is laid 100 links wide: also a reserve is made for a landing place at the river 6 rods, immediately east of the last described line: likewise the last mentioned post is distant $N 14^{\circ} 30'$ to 150 links from a stake set at the end of the 17th course Cuyahoga Traverse.

In the old field map, the name of Superior street was first written "Broad," Ontario "Court," and Miami "Deer," but these words were crossed with ink, and the same names written as given in Pease's map and minutes. In Spafford's map, "Maiden Lane," which led from Ontario street along the side of the hill to Vineyard Lane, was omitted, and the same was never worked or used. Spafford also laid out Superior Lane, which was not on the Pease

map, which has since been widened, and become that portion of Superior street from Water down the hill to the river. "Bath street" is not described in the Pease minutes, but is laid out on the map, and is referred to in the minutes, and the boundaries and extent appear on the map. The Square also is not described in the Pease minutes, but is referred to in the description of Ontario and Superior streets, and is marked and laid out on the map. In Spafford's minutes the Square is thus described: "The Square is laid out at the intersection of Superior street and Ontario street, and contains ten acres. The center of the junction of the two roads is the exact center of the Square." These surveys, the laying out of the lots bounding on the Square, their adoption by the Land Company, the subsequent sale by said Company of the surrounding lots abutting upon it, make the "Square" as much land devoted to public use as the streets themselves, and forever forbids the same being given up to private uses. The easterly line of the city was the east line of one tier of lots, beyond Erie street, coinciding with the present line of Canfield street. The east line began at the lake, and extended southerly one tier of lots south of Ohio street. The line then ran to the river, down the river skipping the lower bend of the river to Vineyard Lane, thence along Vineyard Lane to the junction of Water with Superior street, thence to the river, thence down the river to its mouth. Superior street, as the survey shows, was 132 feet in width, the other streets 99 feet. It is hardly possibly to fully appreciate the sagacity and foresight of this leader of the surveying party. With full consciousness of what would arise in its future growth, he knew the city would have a suburban population, and he directed the immediate outlying land to be laid off in ten acre lots, and the rest of the township into 100 acre lots, instead of the larger tracts into which the other townships were divided. The next year, the ten acre lots were surveyed and laid out. They extended on the east to the line of what is now Willson avenue, and on the south to the top of the brow of the ravine formed by Kingsbury Run, and extended westwardly to the river bank. Owing to the peculiar topography of the place, some of the two acre lots had more and others less than the named quantity of land, and the same occurred in the survey

and laying out of the ten acre lots. The flats were not surveyed off into lots, and there was an unsurveyed strip between the west line of the ten acre lots and the river, above and below the mouth of the Kingsbury Run, running south to a point west of hundred acre lot 278. Three streets were laid out through the ten acre lots, each 99 feet in width to correspond with the city streets, called the South, Middle and North Highway. The southerly one becoming Kinsman street, the Middle, Euclid street at its intersection with Huron; the southerly one received its name from the fact that Kinsman, the east township of the seventh line of townships, was at a very early period distinguished for its wealth and population. The Middle was called Euclid, because that was the name of the next township east. The North Highway was a continuation of Federal street, but changed to St. Clair, after the name of the territorial governor, whose name, in the minds of his admirers, was a synonym of Federal.

Owing to the apparently poor character of the soil upon the lake shore, the great body of early emigrants pushed on into the interior, and for many years there were only a few struggling settlements to be found on the site of the future city. But the general population of the territory rapidly increased, and the seventh Congress, at its first session, by an act approved April 30th, 1802, enabled the people of the eastern division of the territory northwest of the Ohio to form a constitution for a State Government, and for the admission of the State into the Union on an equal footing with the other States. The western boundary of the State was the same as originally established by the ordinance of 1787, but the northern boundary was a line intersecting the same drawn through the southerly extreme of lake Michigan, running east after its intersection until it intersected lake Erie, and thence through lake Erie to the Pennsylvania line. The convention was authorized by said act to assemble on the first Monday in the following November, and within that month, and on the 29th day thereof, they had completed and signed their constitution, and thereupon Ohio became one of the States of the Union. In the same year, 1802, agreeable to an order of the Territorial Court of General Quarter Sessions, the inhabitants of this township called

Cleveland, met at the house of James Kingsbury, on the 5th day of April, and organized a Township government by choosing Rudolphus Edwards as chairman, and Nathaniel Doan as clerk, and elected as Township trustees Amos Spafford, Timothy Doan, and W. W. Williams. They also elected the then usual Township officers, appraisers, supervisors of highways, fence viewers and constables, and thus began the corporate existence of Cleveland. The Township jurisdiction then extended over a large surrounding territory, which was afterwards curtailed by the organization of new townships.

December 31st, 1805, the General Assembly passed an act for the division of Trumbull county, whereby Geauga county was established, which embraced all of Trumbull county east of the Cuyahoga river, and north of the fifth range of townships. In the same act provision was made for the future organization of Cuyahoga county, and by an act passed January 16th, 1810, Cuyahoga county was established. It embraced all the territory now within its limits east of the river, including Willoughby, which was long afterwards annexed to Lake county, and on the west embraced the greater part of Medina and Lorain counties, for which provision had been made for their future organization, and which were afterwards established. It would be too much of detail to give any history of the township; but I notice that one of the supervisors of highways chosen at the first election was Samuel Huntington, who was the same year elected as delegate to the State Convention, the first Senator elected from Trumbull county, afterwards chosen Supreme Judge, and subsequently elected Governor of the State. Stanley Griswold also was Town Clerk, but soon appointed by the Governor to fill a vacancy in the United States Senate from Ohio, and at the end of his term appointed by the President, Judge of the northwest territory. On the 2nd day of March 1799 Congress divided the northwest territory into custom collection districts, the Erie district including the shores of lake Erie from the Pennsylvania line to the Maumee river, then called the Miami of the lake, and the port of entry was ordered to be established at said Miami river, or near Sandusky; and two ports of delivery were also authorized. The eighth Congress at its 2nd session, on the 3rd day of

March 1805 divided this district, making the west boundary thereof the Vermillion river, and authorized the President by proclamation to designate the port of entry. This was done by the President, and he designated Cleveland as such port of entry. but no authoritative date of that proclamation can be found in Cleveland, as the records of the office have been destroyed by fire ; but on the 17th day of January, 1806, Judge John Walworth was commissioned collector of the district. On the 15th day of October, 1814, the Township of Newburgh was organized from the territory of this original seventh Township of the 12th Range, the north line thereof being a prolongation of the original north line of the seventh Township till it reached the ten acre lots ; thence south and west on the line of the ten acre lots to the northwest corner of 100 acre lot 278. It embraced within its limits the residences of those then important citizens, James Kingsbury, Erastus Miles, and Rudolphus Edwards. Indeed, Newburgh township, for a considerable period, was the more important place, as water power was to be found there, and a good mill had been built. Most of you doubtless remember in former days the sneer of our rival cities on the lake shore, who described Cleveland as the town on the lake six miles from Newburgh. The prejudices of the emigrants against the soil gradually disappeared as its capacities became known, and the advantages of its situation began to prevail. Its being established as a port of entry, and its location as the county seat, all tended to increase the population, and on the 23rd day of December 1814, an act was passed by the General Assembly to take effect on the first Monday of June following, "To incorporate the Village of Cleveland, in the County of Cuyahoga." The boundaries of the village are described in the act as so much of the City plat of Cleveland, in the Township of Cleveland and County of Cuyahoga, as lies northwardly of Huron street so-called, and westwardly of Erie street so-called, in said city plat as originally laid out by the Connecticut Land Company, according to the minutes and survey and map thereof in the office of the recorder of said County of Cuyahoga. Agreeable to said act, on the first Monday in June, 1815, twelve of the inhabitants of that village met, and unanimously elected Alfred Kelley as President,

Horace Perry Recorder, Alonzo Carter Treasurer, John A. Kelley Marshal, George Wallace and John Riddle Assessors, Samuel Williamson, David Long, and Nathan Perry, Trustees.

Let us pause a moment in our narrative, to consider the situation of affairs at the time the General Assembly enacted the law incorporating the village. The war with Great Britain, which had been declared on the 18th of June 1812, was still raging, although in fact on the next day the commissioners of the two countries agreed upon the terms of a treaty of peace and the suspension of hostilities, but owing to the slowness of communication, for some time this was not known, and after the actual signing of the treaty, naval engagements took place, and the battle of New Orleans was fought. At the time this legislature assembled to act upon the affairs of the State, the war was in full progress. During all the previous Summer the great navy of our then enemy kept the seaboard coast in constant alarm, and actually landed a force on the Maryland shore, which ravaged the country, and captured and burned the capitol of the nation. All along the Canadian border, on both sides troops were stationed and occasionally fierce and bloody attacks were made by the respective forces over the lines. The great forests of the northwest were filled with savage Indians, who hung upon the border like a dark cloud in the horizon, incensed perhaps justly by the greed of advancing emigrants, and stimulated by the money and promises of the enemy, scalping and murdering any unwary settler, and ready to fall on any undefended settlement. Happily, by the gallantry of Perry and his brave sailors, the naval banner of St. George had been hauled down and surrendered on lake Erie, and over its waters the Stars and Stripes floated triumphantly.

In looking over the acts of that General Assembly, one can scarcely imagine the country was in a state of war. They were proceeding to enact laws the same as if in a state of profound peace. Among other acts passed, I find those, regulating the course of descents and distribution of personal estates, to establish churches and library associations, to prevent injury by dogs, to regulate the practice of the courts, to provide for the improvement of the rivers, and many others, indicating a well ordered civil society. There is, however, an undertone discoverable from the

act to levy and collect the direct tax apportioned that year to the State of Ohio by the General Government, and the act for the discipline of the militia. The State had been divided into brigade and regimental divisions, and to each regiment there was authorized one company of cavalry, and one of artillery; and every able bodied citizen between the ages of 18 and 45, either residing in, or coming within the State, *was obliged to enroll himself in the militia*, if not a member of a cavalry or artillery company; and within twelve months after such enrollment, and sooner, if notified, provide and *equip himself* with a good musket and bayonet, fusee or rifle, a knapsack and blankets, and two spare flints, a pouch with a box therein containing not less than 24 cartridges, suited to the bore of his musket or fusee, each cartridge to contain a proper quantity of powder and ball, or pouch and powder horn with 24 balls suited to the bore of his rifle, and a quarter of a pound of powder. The spirit of the people is well expressed by a resolution of the General Assembly referring to the situation, wherein they declared: "We will suffer every hardship, submit to every privation in support of our country's right and honor; though we love peace and invoke its blessings, yet we will not shrink from the dangers of war."

Indeed, the State of Ohio was formed by no ordinary race of men. The constitution which they adopted was made and perfected within the short space of 29 days, and it was the purest and most remarkable constitution for a representative government, which up to that time had ever been adopted. The whole legislative power of the State was vested in the General Assembly; the Governor had no part in the legislative voice, but was merely the executive officer; nor was there any Lieutenant Governor to preside over the Senate; the judiciary also were appointed by the General Assembly, to hold their offices for brief terms, or so long as they should well behave. The early emigration to Ohio represented in its composition fully and adequately the spirit of the Union. On her fruitful soil the culled grain from New England, the Middle States, and the South was sown, and the product was a race of giants. If these emigrants were not versed in the learning of universities and colleges, they had been educated at a higher

academy. The prominent elder men had been soldiers of the revolution, and the young men had graduated in that school of self-sacrifice, nobleness and exalted patriotism, which eminently fitted them to become the founders and builders of a State. In looking back to that period, they seem to resemble in appearance the great trees of the virgin forest which covered the land, and not the smaller timber of a second growth. It may be Ohio vaunteth herself, but not unseemly.

To resume our narration of the village history, the Council of the village immediately organized, and continued to exercise the ordinary municipal control of the territory embraced in the corporate limits. For several years the officers of the corporation were, as at first, unanimously elected; but as numbers increased, often more than one ticket was in the field. On the 15th day of October, 1815, upon the petition of John A. Ackley, Levi Johnson, and others, the Council laid out and established Bank, Seneca, and Wood streets from Superior street to the lake; also St. Clair street, which was extended to the river. A jog was made at Erie from Federal street, undoubtedly from the fact that a continuation of that old street on its original line to the river would have destroyed the lots fronting on Mandrake Lane. Also Euclid street was then established, from the Square to Huron street, the space between that point and the old middle highway being in the Township. That street in the early days, and for a long time afterwards, was by no means a popular highway. Stretching along at the southerly side of the ridge, it was the receptacle of all the surface waters of the region about it, and during much of the time was covered with water, and for the rest of the year was too muddy for ordinary travel. Diamond street, as it was then called, was also laid out around the Square.

Many interesting facts in regard to the early history of the village might be re-called from the records of the village Council. I noticed among other things, that in 1817 the Council passed an ordinance to reimburse 25 citizens, who had subscribed in all \$198 towards the building of a school-house, by giving them orders on the treasurer, payable in three years. Indeed, it seems that city orders were the currency of that period, for in the previous year the

village had authorized the issue of orders on the treasurer, but with a proviso limiting the amount to double the funds in the treasury, and in the following year, to provide small change, orders were authorized to be issued in small sums to any person depositing with the treasurer good, sound bank bills or specie, but not to exceed \$100 to any one person. In 1829, by a vote of a majority of the trustees, a fire-engine was purchased at the cost of \$285, for which a treasury order was issued in payment. This was thought to be a piece of extravagance, and at the next election the dissenting trustee was reëlected with an entire new board of officers; but the usefulness of the machine vindicated the wisdom of the purchase, and subsequently the trustee who was most active in the matter, was made president, and reëlected till he was promoted to a higher office. In 1832 active measures were taken to prevent the spread of the "Indian" Cholera, as it was called, a Board of Health was appointed, and vigorous sanitary action taken. A quarantine was established and a hospital provided for strangers or emigrants coming into the village attacked with the disease. In spite of all their efforts, the scourge came and for sometime was quite destructive, as it was in all the lake towns. Among others who held the office of President was Leonard Case, and Reuben Wood, afterwards Chief Justice and Governor of the State, was both Recorder and President.

The time when the village was incorporated, notwithstanding the war, was one of rapid development of the State. By that same General Assembly the towns of Cincinnati, Circleville, Portsmouth, and Urbana were also incorporated. The ten years immediately following the war were barren of great events, yet, owing to the financial difficulties and other incidents growing out of the disturbed condition of the country, there was a large emigration to Ohio, which offered to the active and enterprising cheap land and fruitful soil. In the decade from 1810 to 1820 the population of the State doubled, and the number of inhabitants had increased to over half a million. The building of the Erie Canal had moved and stimulated the people of Ohio, and in 1820 legislation was commenced looking towards the construction of a canal to connect Lake Erie and the Ohio River, and on February 24th, 1825, an

act was passed for the construction of the work. The northern terminus was located at Cleveland, chiefly through the efforts of Alfred Kelley, seconded by his fellow citizens; and in that year the great Governor of New York came to Ohio to inaugurate the work, when the ground was first broken, DeWitt Clinton himself handling the spade. Its construction was rapidly pushed forward, and it was ready for navigation in the year 1827, under the honest and able management of Alfred Kelley, who was acting commissioner during the period of its construction.

Although Cleveland had long been a port of entry, there was a heavy bar at the mouth of the river, which greatly impeded navigation and commerce. The 18th Congress, however, at its second session, by an act passed March 3rd, 1825, appropriated five thousand dollars to the building of a pier at Cleveland. The work was immediately commenced, subsequent appropriations were made, a new channel for the river cut into the lake, piers built and completed in 1828, so that there was a good channel of at least ten feet in depth. These two improvements gave the village a strong impetus, and from that time the population has steadily increased.

On the 31st of December, 1829, the legislature passed an act extending the village boundaries, and all the land lying on the river from the southerly line of Huron street down the river to a point 12 rods westerly of the junction of Vineyard Lane with the road leading from the village to Brooklyn, thence west parallel with said road to the river, and down the river to the old village line, was annexed; and on the 18th of February 1834, another act was passed, again extending the village boundaries, which added all the two acre lots east of Erie street, the tier south of Ohio street, and a parcel at the southwest corner of the original plat, which was not originally surveyed or laid off. I notice that this last piece of land, called Case's Point, was excepted from the operation of the act until the first day of January following. And on the fifth day of March 1836, an act to incorporate the City of Cleveland was passed, which changed the village to a city.

The following is a description of the territory, which was thereby declared to be a city, and "the inhabitants thereof created a body corporate and politic by the name and style of the City of Cleveland."

"Beginning at low water mark on the shore of Lake Erie at the most northeastwardly corner of Cleveland, ten acre lot number one hundred and thirty-nine, and running thence on the dividing line between lots number one hundred and thirty-nine and one hundred and forty, numbers one hundred and seven and one hundred and eight, numbers eighty and eighty-one, numbers fifty-five and fifty-six, numbers thirty-one and thirty-two, and numbers six and seven of the ten acre lots to the south line of the ten acre lots, thence on the south line of the ten acre lots to the Cuyahoga River; thence down the same to the extreme point of the west pier of the harbor, thence to the township line between Brooklyn and Cleveland, thence on that line northwardly to the county line, thence eastwardly with said line to a point due north of the place of beginning; thence south to the place of beginning."

The eastern boundary of the city fell on a line which would now be described as a line through Perry street north to the lake, and south to the southerly line of the ten-acre lots. In the meantime the Village Council in 1820 laid out Seneca south of Superior and Michigan to intersect it, and the next year Michigan was extended to Vineyard Lane. In 1827 Champlain st. was laid out, and in 1828 Prospect street east of Ontario. Michigan street now soon became the fashionable street. Following the laying out of these new streets came the allotments of the original two-acre lots. On January 12th, 1833, Alfred Kelley made an allotment of lots 191-2-3, which lay immediately south of Bath street and west of Water. In the month of December of the same year, Richard Hilliard, Edmund Clark, and James S. Clark made the center allotment, which embraced all the land in the first bend of the river. In April 1834, Leonard Case allotted the ten-acre lot at the southeast corner of the old plat, and widened the Newburgh road, as it was called, now Broadway, from its width as a State road of 66 feet to 99 feet, to correspond with Ontario street as originally laid out. In the same year, John M. Woolsey allotted all the two-acre lots south of Superior and west of Erie. In November 1835, Lee Canfield, Sheldon Pease, and others allotted the two-acre lots at the northeast corner of the city plat, and also the adjoining ten-acre lots by their plat they laid out and dedicated Clinton Park.

Between this park and the lake they built for that day fine houses with a double front, facing the lake to the north and the park to the south, expecting, no doubt, the fashionable population would choose that section to build their palatial mansions. In January 1836, Ashbel W. Walworth and Thomas Kelley allotted the two-acre lots south of Ohio street, and also a large tract of land lying adjoining and reaching to the river, which was a part of the old unsurveyed parcel, but generally known as hundred-acre lot 487. But in this growth and expansion the new city was not without an active and determined rival. In 1833, some enterprising residents of Brooklyn, associating with a number of Buffalo capitalists, purchased a tract of about eighty acres, bounded south by Detroit street, west by the river, and north by the township line, and laid the same out into lots, blocks and streets, and it was known by the name of "The Buffalo Company Purchase." In 1835, Mr. Charles Taylor, owning a farm immediately west of this allotment, laid the same out into lots and streets, which is still known as the Taylor farm allotment. His son, a well known and honored citizen still resides on one of the lots bearing as his Christian name DeWitt Clinton. In 1836, Richard Lord and Josiah Barber allotted the land immediately south of these two plats. Not to be outdone in the matter of city organization, these residents in that part of Brooklyn township also procured the passage of an act incorporating themselves into a city, including these allotments, and some other outlying lands in the township of Brooklyn, and gave to their new city the high sounding name, "The City of Ohio." There is some rather interesting history connected with the organization of that city. The Cleveland bill was pending at the same time, and one of its provisions directed the village council to call an election for the officers of the new corporation some time in the month of April following, which was the usual month for holding the Spring elections. The bill for the City of Ohio authorized and directed the election of its officers to be held on the last Monday of March, and their bill was passed and took effect on the third day of March, just two days before the passage of the Cleveland act, and their election was held on said last Monday of March. In some manner, "they gained the pole," and

won by a head the heat in this municipal race, and became a full fledged city, while Cleveland yet remained a village. In April 1837, James S. Clarke, in company with others, allotted nearly all that part of that City of Ohio lying south and west of the Barber & Sons allotment, and called their plat "Willeyville." When this gentleman and his other associates had made the allotment of Cleveland center, as it was called, they had laid out Columbus street from the north line to the river. In this new plat, over the river, Columbus street was laid out through its center to connect with the Wooster and Medina Turnpike. as it was called, at the south line of the City of Ohio; the northern end of said street being exactly opposite the southern end of the Columbus street of the other plat. This Mr. Clarke also erected a large block at the northern end of Columbus street, and two large blocks on the opposite corners of Prospect street, where it intersects Ontario. The proprietors of the Buffalo Company, not to be outdone, had built a large hotel on Main street in their allotment, to attract the fashionable travel arriving by the lake. Mr. Clarke on laying out the Willeyville tract, expended a large amount of money in grading the hill, which brought Columbus street down to the river, and had a bridge built over the river connecting his street, in the expectation that the traffic and travel from the south would reach Cleveland by this route, and be brought up Michigan street on account of its easy grade. The building of this bridge was too much for the excited inhabitants of the City of Ohio. Under some fancied claim that the bridge was not legally located, soon after its construction, in 1837, they turned out in large numbers for the purpose of tearing down and destroying the bridge. The inhabitants of Cleveland rallied to the rescue under their valiant marshal, and for a short time a bloody riot was imminent, but better counsels prevailed; a decree from the Court enjoining any interference with the bridge was obtained, and only a few bloody noses were the results of this threatened war. Alas, for human expectation of wealth based on the inflation of paper currency, for that was a period of great expansion of the paper currency of the country. When the crash happened, which is always in such cases sure to come, Clarke became insolvent, and all his lots and blocks were

sold by the Sheriff. In like manner, many of the proprietors of the Buffalo Company became bankrupt, their grand hotel remained tenantless, and when I visited it officially in 1850, its walls were badly cracked, and it was occupied as a cheap tenement house, the only remains of its former grandeur was its magnificent staircase, and the only souvenir remaining in memory that I was able to discover was, that one Daniel Parish, Esq., at that time no undistinguished member of the Cleveland bar, on a return from a wedding journey after one of his many marriages, had led thither as the abode of fashion, his beautiful, if not blushing bride. The same sad fate happened to the grand houses opposite Clinton Park. One was drawn off on to another street, one torn down, and I think the remnants of one still remain in a changed condition as the sole survivor of those great expectations.

As provided in the act of incorporation, the village council ordered an election for officers, to be held on the 15th day of April, 1836, and after a spirited canvass, the following ticket was elected : John W. Willey, mayor ; Richard Hilliard, Nicholas Dockstader, and Joshua Mills, aldermen ; Morris Hepburn, John R. St. John, Wm. V. Craw, Sherlock J. Andrews, Henry L. Noble, Edward Baldwin, Aaron Stickland, Horace Canfield, and Archibald M. T. Smith, councilmen. 580 votes were cast at the election, and the successful candidate for mayor had quite a majority over his distinguished opponent Leonard Case. This vote indicates the city's population to have been between three and four thousand. When the council organized, Sherlock J. Andrews was elected its presiding officer. Mr. Henry B. Payne was chosen city attorney, and also elected clerk of the council ; but the duties of that office were performed by another person, whose beautiful handwriting appears on the first journal of the city, which is signed officially by Mr. Payne, who turned over his salary to the skillful penman performing the labor. The act by which the city was incorporated is a most excellently drafted instrument. It shows on the part of its author a clear understanding of municipal rights and duties. The language is clear and precise, and throughout its whole length it bears the impress of an educated, experienced legal mind. It was undoubtedly the work of the first mayor, and I may add, for the purpose

of furnishing the basis of wise city legislation, for clearness, precision, and certainty, it will not suffer by comparison with any of the municipal codes enacted since the adoption of the present constitution. Among other provisions of this instrument, the city was authorized to levy one mill on the dollar in addition to the general tax for the support of common schools; and it also provided for the creation of "A Board of Managers of Common Schools in the City of Cleveland." From this has grown our present public school system.

Notwithstanding the facilities they possessed for lake and canal navigation, the citizens of the city became early interested in railroad enterprises. On the third of March 1834, the legislature passed an act, whereby Aaron Barker, David H. Beardsley, Truman P. Handy, John W. Allen, Horace Perry, Lyman Kendall, and James S. Clarke, together with those who should become stockholders, were created a body corporate by "the name and style of the Cleveland and Newburgh Railroad Company," and authorized to construct a railroad from some point in lot number 413 in Newburgh township, to the harbor in Cleveland, and were authorized also to transport freight and passengers on this road "by the power and force of steam, animals, or other mechanical force, or by a combination of them." The eastern terminus named was near a stone quarry on said lot, which was near the corner of the four townships, Newburg, Warrensville, Cleveland, and Euclid. A depot was built there, and the neighboring farm lands were laid into lots. The capital stock authorized was \$50,000, which was subscribed and the road built, Ahaz Merchant being engineer in chief, the track being laid through Euclid street and across the Doan brook up to the quarry. The rails were made of wood, the motive force being "animals" two-horse power, tandem at that. It was laid out along the south to the west side of the square, and the depot was a part of the old barn of the then Cleveland Hotel, where the Forest City House now is. This road did not exactly reach the harbor, for in that remote stone age the square was the chief dumping ground for the freight from the quarry. It was operated for a few years, and then abandoned, and the rotting debris for a long time remained a nuisance in the highway.

At the same session, however, in which the city was incorporated, acts were passed to incorporate the Ohio Railroad Company, leading from the east line of the State through the lake counties to the Maumee river, and thence to the State line. The Cleveland & Pittsburgh Railroad Company, leading from Cleveland to the State line, or some point on the river in the direction of Pittsburgh; The Cleveland, Columbus, & Cincinnati Railroad Company, leading from Cleveland through Columbus and Wilmington to Cincinnati; The Cleveland and Warren Railroad Company, leading from Cleveland to Warren, and the Cleveland & Erie Railroad Company, to lead from Cleveland to Ravenna and Portage county. The chief offices of all these companies was this city, except that of the Ohio Railroad Company, which was located in the City of Ohio. A large amount of subscription was obtained to the stock of this company; it also obtained, under the act of 1837, which authorized the State to loan its credit to railroads, a large advance in money from the State. By the 17th section of its charter, its treasurer was authorized to issue orders, and under this power, it issued a very large amount of orders in the similitude of bank bills. By these means, a large amount of work was done towards the grading and superstructure. But the collapse which followed that period of inflation carried with it this enterprise, and in 1845 the legislature passed an act, authorizing the Board of Public Works to sell out the whole concern, from which little, if anything, was realized, and the whole thing proved an utter failure. Nothing was then done under the other charters. Some few persons still keep, as a souvenir of that period, the bills of the Ohio Railroad Company, on whose face is beautifully engraved a railroad train at full speed, and in contrast below it the graceful form of a flying deer.

The condition of the lake shore, from the action of the waters of the lake and the springs in the bank, was always a matter of interest, and sometimes of alarm, to the inhabitants of the city, and in 1837 an act was passed, incorporating the Lake Shore Company, authorizing them to protect the lake bank from caving and sliding, and as a means of remuneration, to build wharves and piers along the shore, and the city, in its corporate character, was

authorized to become a member of that corporation. I cannot learn that anything was done under this authority ; but afterwards the city employed Col. Charles Whittlesey, at a large expense, to pile certain portions of the lake front, and afterwards, when railroads were built, for their own protection, they continued this system of piling, by which the banks have been protected from caving and sliding. The City of Ohio, not to be outdone, in the same year this Lake Shore Company was incorporated, procured an amendment to its charter, by which it was authorized to cut, dig, and excavate canals, slips, and basins, and pay for the cost of the same by assessment upon the abutting property. By this same act, a large parcel of territory in the southwest part of that city was carried back into the township of Brooklyn. That city proceeded under the act to construct a canal leading out of the old river bed, and paid for the same by this seductive but ruinous method of taxation, to defray the cost of public improvements. The scheme was a failure, but the dry bed of the canal has since been utilized for the laying of railroad tracks. From want of means, being unable to enter upon the construction of railroads, the citizens of Cleveland contented themselves with procuring charters for the construction of plankroads leading out on all the principal highways from the city.

The State of Ohio recovered rapidly from the commercial depression of 1837 and years following, and in 1845 enacted a new and wise banking system, four new banks under it being established in Cleveland. The city of Cleveland, however, suffered less by the panic of that time than the other cities upon the lake shore, and by the census of 1840, it had a population of 6071, the city of Ohio being only 1577. In spite of the continued financial difficulty, the city continued to advance, although its finances were in a somewhat disordered state. The bad practice of issuing orders on the treasury, payable on demand, although the treasury was empty, inherited from the village, still prevailed. These orders passed as currency, though at a ruinous discount, and in 1847 had increased to a large volume. At that period, Mr. Henry B. Payne freely gave much of his valuable time to the city affairs, and through his strenuous efforts this debt was

funded, and from that time the city has promptly met every obligation at its maturity, and no city has since had a better financial credit. In 1847 also, the township of East Cleveland was organized, which took into its jurisdiction all of the 100 acre lots of the original surveyed township No. 7 north of the Newburgh line, and on the 22nd day of March 1850 an act of the legislature was passed annexing the remaining part of said township to the city of Cleveland, which embraced all of the ten acre lots, and all the unsurveyed strip lying along the bank of the river north and south of the mouth of the Kingsbury Run. During this decade, the citizens of the city became again awakened to the importance of railroad communication. Steps were taken to revive and amend the old charters, and on the 24th of February 1846, an act was passed, authorizing the city of Cleveland, by commissioners named therein, to subscribe \$200,000 to the capital stock of the Cleveland, Columbus & Cincinnati Railroad Company, and to issue its bonds in payment of these subscriptions, and on February 16, 1849, in like manner to subscribe \$100,000 to the capital stock of the Cleveland & Pittsburg Railroad Company, and to issue the bonds of the city in payment thereof, and in February 1851, the sum of \$200,000 to the Cleveland, Painesville & Ashtabula Railroad Company. The City of Ohio was also authorized to subscribe \$100,000 to the Junction Railroad Company, leading from that city to Toledo. These two latter companies have been consolidated, and form a part of the Lake Shore & Michigan Southern Railroad Company. It was the efficient aid thus furnished by the city's credit, which enabled the promoters of these enterprises to construct and complete the roads at that time, and in so short a manner after the work was entered upon.

In that ten years the city had increased nearly three-fold, for the census enumeration of 1850 showed its population to be 17,034. The census taker of that year, not being able readily to discover by observation the boundaries of the City of Ohio (from the fact that the streets of the city had been dedicated and opened by separate tracts), took the count for the township of Brooklyn as one municipal body, and the number of the inhabitants for the whole township was 6,071. There was a blunder, however, made by

the census taker, for he was then ignorant of the fact that a small spit of land lying immediately west of the west pier, as it existed in 1835, and north of the line of Brooklyn township, was within the legal limits of the city of Cleveland. There were a few shanties on this bit of sand, and they were counted as inhabitants of the township of Brooklyn. I have personal knowledge of this mistake, for I committed it myself. This increase of the city made a supply of artificial light and water a public necessity.

On the 6th day of February, 1846, the Cleveland Gas Light and Coke Company had been incorporated, but nothing was done till 1848, when Moses G. Younglove became interested therein, and through his energetic efforts, the building of their works and the laying of pipes commenced, and the city was soon supplied with gas. The city, following the wise policy, recommended and approved by the best political economists, of preventing competition, under the false cry of opposition to monopoly, by controlling the price of gas when granting its privileges to the company, has been able to have furnished to its citizens light cheaper than that of any other city in the country, except Pittsburgh, which is in the center of the gas coal region.

In June, 1833, an act was passed by the General Assembly incorporating Philo Scovill and his associates as the Cleveland Water Company, granting them the privilege of furnishing the inhabitants of the village of Cleveland with water. Nothing was done under this act. March 19, 1850, this act was amended, extending their privileges so as to include the inhabitants of the city as their customers. The company was organized, some stock subscribed, but nothing further was done. But in the Mayoralty of William Case, under his able and energetic lead, the city corporation entered upon the matter. There was much preliminary discussion, many surveys and estimates made, and in 1854 a plan was adopted. To carry out this plan on the first day of May 1854 the passage of an act of the Legislature was procured, enabling the city to locate its reservoir and make its connections with the lake within the limits of the City of Ohio, and authorizing the city to make a loan of \$100,000 to carry out the project. The loan was conditioned upon a vote of popular approval, which was given.

Backed by the credit of such sterling men as Richard Hilliard and W. A. Otis, the city readily negotiated the loan, and the work was entered upon, and by the year 1846, the city of Cleveland took pride in furnishing the great numbers, who attended the State Fair held within its limits that year, with water from Lake Erie.

Pursuant to the constitution of 1851, the first Legislature following its adoption passed a general law for the organization and government of all the municipalities within the State, and repealed all the old charters. The only substantial change in the Cleveland organization was the abolition of the Board of Aldermen, and the establishment of a separate police court, the duties thereof having previously been performed by the Mayor. The building of the water works, and the evident mutuality of interests, had substantially obliterated all the ancient rivalry, and in 1854, in accordance with the general law then in force, which provided for the union of adjoining cities and the annexation of territory, the two cities passed the necessary ordinances for union, which were approved as required, by the popular vote of each municipality, the total vote being 3,160, indicating a population of about 25,000. The terms of annexation being agreed upon and signed June 5, 1854, by H. V. Wilson and F. T. Backus on the part of Cleveland, and by William B. Castle and Chas. L. Rhodes on the part of the City of Ohio, on the same day, the latter city passed the required ordinance, and on the next day the city of Cleveland passed its ordinance for that purpose, and thus, on June 6, 1854, the City of Ohio became an integral and important part of the city of Cleveland. The public debt of the City of Ohio was assumed by the city of Cleveland, except its liability for bonds issued to pay its subscription to the Junction Railroad Company, which were afterwards paid by the sale of the stock. Another of the provisions of the agreement of annexation gave to the city of Cleveland as it existed before the Union, any surplus it might realize by reason of its subscription to the stock of the Several railroads before mentioned, which surplus was to be expended under the direction of the trustees representing that district in the new corporation, for a public park or other public use. It is well known, that the city realized a large surplus from its stocks after the payment of its

obligations given therefor, perhaps the only case of the kind in the whole country. In addition to this fund, the city also realized a considerable amount of stock from the sale of its lands north of Bath street on the lake shore to these several roads, to which it had given its credit. March 28, 1862, an act was passed by the Legislature creating a Board of fund commissioners to take charge of this fund. Nothing more need be said of the management thereof, than that from this fund over a million and seven hundred thousand dollars has been paid to discharge the debt of the city, and over a million still remains in the hands of the commissioners. It is one of the pleasant recollections of the person, who addresses you, that in his official capacity representing this community, he inserted in his own hand-writing in the original bill as it was passed by the House of Representatives of the General Assembly, which was concurred in by the Senate, and became a law, the honored names of Henry B. Payne, Franklin T. Backus, William Case, Moses Kelly, and William Bingham, who thereby were made the commissioners of said fund. The new city increased rapidly, and at the census of 1860 the enumeration showed a population of 43,838. Under the provisions of the general law, various annexations have since been made at different times. By virtue of an ordinance passed February 16, 1864, a portion of Brooklyn township lying northerly of Walworth Run was brought into the corporation, and on February 27, 1867, another portion of Brooklyn township and a part of Newburgh township was annexed. These annexations extended the line of the city westerly of the old limits of the City of Ohio on the lake shore, and included large quantity of land south of the original City of Ohio, and a part of the 100 acre lots on the north part of Newburgh township, and on December 14, 1869, original lot 333, then being a part of Newburgh township, was annexed. These annexations added a large area to the territory of the city, but its numbers were not much increased thereby. The stimulus, however, given to manufacturing and other industries during this decade, largely increased the growth of the city, and the census of 1870 showed a population of 92,829. The advantages of the school system, the need of protection from fire, police supervision, water, gas and sewage facilities, induced the inhabit-

ants immediately outlying the city limits to knock for admission, and in 1872 steps were taken to annex the village of East Cleveland, and on the 14th of October the proceedings were completed for that purpose; and by an ordinance of November 19, 1872, still further annexations were made from the townships of Brooklyn, Newburgh, and East Cleveland, and on the 16th of September 1873, a large part of the remaining portion of Newburgh township was annexed, extending the city line beyond the crossing of the old Newburgh road by the Cleveland & Pittsburgh Road.

Since that time no further annexations have been made, and the census of 1880 showed a population of 159,404. The rate of increase for the last decade was over seven per cent., and the same ratio for the last four years would carry the number beyond 200,000. There are many other matters connected with the corporate growth, which time would fail me to mention. The organization of churches and charitable associations, the schools and library associations, the banking institutions, the fire and police and sewage system, and many other matters would each easily form a subject for a separate paper. In these stages which I have recounted of the city's growth, three figures stand forth prominently as actors, the first president of the village, the first mayor of the city, and the third, a worthy compeer of these two, many times the village president, and the oldest surviving mayor, John W. Allen. Born in Connecticut the same year Ohio became a state, trained to the law, he came here the same year the work on the Ohio canal begun. Early and ardently devoted to the welfare of the place which he had chosen for his home, he was repeatedly elected the presiding officer of the village, sent to the Legislature, was a Senator when the act of incorporation was passed, promoted from thence to Congress, and returning at the end of his four years term of service, and as a sense of the approbation of his constituents he was by them elected mayor of the city. To all public enterprises, and specially to the organization of the railroad companies, whose original charters had been granted when he was a member of the Legislature, he gave his time and money with generous heart and liberal hand. He still remains among us, carrying his more than eighty years, and the younger generation

who observe his erect form, his active step and courtly manner, may, as has been said, "form some estimate of the race of whom he was not the foremost." The first president of the village, also born in Connecticut, at an earlier period, trained to the law, arriving at the village the same year that the county was organized then in the first year of his manhood, appointed the first prosecuting attorney of the county, soon sent to the Legislature, a member thereof when the Act incorporating the village was passed, chosen its first president, was always devoted to the city's interests. Chiefly by his influence, Cleveland was selected as the northern terminus of the Ohio canal, he was the acting commissioner during its construction, negotiating the State's loan to pay for its cost, which by his able and honest administration was brought within the original estimate. Public considerations induced his removal to the Capital of the State, but he never forgot the corporation of his own creation. Distinguished as a financier, a legislator, author of the Ohio State Banking System, from which the National Bank System is in great part copied, growing with the growth of the State, and when canals had given way to railroads, becoming the active promoter of these enterprises, and especially of the roads leading out of this city, he stands out as one of the great men of Ohio's first half century.

The first mayor, born in New Hampshire, graduate of an ancient college, trained in the law, came here also in village times. Possessing a finer genius, if not the great executive power of the first president of the village, as lawyer, legislator, and judge, he also gave his time, talents and learning to the city, ardently encouraging and aiding every enterprise for the promotion of its welfare. The impress of his genius is indelibly marked upon the early life of the city. I trust the time may arrive, when the city government shall no longer find its habitation in hired tenements, with its archives in unsafe chambers, but on some suitable site shall build a hall worthy of itself, before its facade in some appropriate spot, where shall be placed in bronze or marble a statue exhibiting to all beholders the stern but noble form of Alfred Kelley, and a correct image of that accomplished gentleman, John Wheelock Willey. I should do injustice to my own feelings,

and be untrue to history, if I omitted also the mention of him upon whom their mantle fell. Born within the limits of the original surveyed plat of the city, presumptive heir to great wealth, he was not content to spend his time and money for purposes of selfish gratification. Uniting in himself the executive ability of Kelley, and the fine genius of Willey, he ardently devoted his energies to the city of his birth. Serving as councilman, alderman, president of the council, and mayor, he faithfully executed these public trusts, and freely gave his time and means to the promotion of all that tended to increase the prosperity of the city, but when still rising in public esteem, and being marked as a man who could serve the State and Nation as well as the City, struck down in early manhood by the fell destroyer, William Case. The loving memory of a brother, by his noble public gifts, has entwined the name of Case, so worthily borne by father and sons, with the city's growth, to continue as long as literature shall charm and be a solace of the heart, and science enlarge and strengthen the intellect of man.

In this sketch of the corporate life of the city, one thing above all is evident, that its growth has been largely due to the noble public spirit of its citizens, and therefore the moral of my theme is easy of apprehension. Mere numbers, or extent of boundaries does not constitute the continuing city, or any semblance of the *civitas Dei* of the saints and sages. The ideal city, besides advantage and beauty of location, must be nobly and wisely governed; the municipal duties must be accepted and performed as public trusts, and not for private and political gain; its streets must be well paved and lighted; it must be furnished with abundant water, and well provided with means for the disposal of its sewage; it must have efficient and capable police and sanitary supervision, and property and life must be secure against violence and accidents of flood and fire; there must be easy and convenient methods of rapid transit; there must be a wise adjustment of the municipal burdens, and opportunities offered for the employment of labor, and the ordinary pursuits of trade and commerce; and there must be furnished all the best means for intellectual, moral and esthetic culture. When to these things are added inventions to abate the

smoke nuisance, and deaden the noise of solid pavements, the city will undoubtedly furnish the greatest opportunity for human felicity on the face of the globe.

But this beautiful picture hath its dark side. There is ever to be found inhabiting the city a criminal class, and "the poor ye always have with you." The growing tree absorbs from the earth at the same time its sweetness of fruit, and bitterness of bark, so this corporate growth takes in alike the good and bad. Its forces attract not only the intelligent, active and virtuous, but the ignorant, irresolute and vicious, and these once caught in the whirl of the city's eddy, never escape. Whenever the soil of the earth is broken, noxious weeds grow with more vigor than cultivated grains and grasses, so the vices arising from ignorance, intemperance and lust, breed with great rapidity from this human contiguity. When all moral, charitable, and intellectual means have been exercised to instruct and reclaim the vicious, a large residuum will still be left. These means can never be wholly efficient; the earthly millennium is only a dream of fancy, and whether evil can be wholly eradicated from organized society is an unsolvable problem. After all individual and organized methods of instruction and charity are exhausted, there is still room for the exercise of municipal power. The wisest method in these matters is rigid restrictive regulation. I am aware there is a mawkish sentiment quite prevalent, which protests against this kind of legislation, as giving legality to sin and iniquity, and as interfering with the divine order of punishment; but the true city will not heed such protest, or yield to a logic, whose major premise is the assertion that God is the author of loathsome contagious disease, If our recent city administrations have been smitten with the degeneracy of modern politics, there is hope for the future, as the great body of the citizens still desire good municipal government, and the noble public gifts within the present decade by such men as Stone, Hurlbut, Woods, and others, demonstrate that the public spirit of the present day is not inferior to the past. Let other cities boast of their temples, their triumphal arches, and columns, their towers, their docks, their halls, and great public buildings for exchange and commerce, yet "as one star differeth from another

star in glory," may the monuments of Cleveland continue to be the noble endowments of her citizens for the promotion of literature, art and science, and for the alleviation of pain and suffering. It is impossible in a sketch like this to mention the many good and true men who have given their services to the city's government; much less to the great body of its citizens. In great events but few prominent actors can be named. In wars only the great commanders are mentioned, but the common soldiers who have equal courage, who fight the battle and win the victory, from very number have no blazoned chronicle, nor their names written in any history. So in a city's life, the unnumbered multitude are born, marry and are given in marriage, pursue the ordinary avocations of life, and die mourned by friends, and only remembered as the great aggregate composing the city's life. In their sphere, however, they exercise and perform all the duties and obligations the same as others, and equally contribute to all that upholds society. From this number I select only one name for mention. Born of a revolutionary sire, who was here when General Cleveland and his party arrived on the 22nd day of July, 1796, and became one of the first associate judges of the county. His son came with him, bearing his father's name, and succeeding to his business; never seeking public promotion, devoted to his occupation, fulfilling every obligation, always enlarging his business to meet the advancing tide of population, retiring only when compelled by age and bodily infirmities, his active career continued through the period of the village and far down into the city life, and he died in good old age, leaving a colossal fortune to his issue and his grandchildren. May we not reasonably indulge the hope that some one of his descendants, possessing as well the maternal as paternal ability, starting on the highest plane of commercial pursuits, increasing his ancestral inheritance manifold, will not be content to leave the name of that ancestor to be borne by some narrow street or alley, but by some noble public benefaction, forever connect with the memory of the City's first half century's life, the commercial ability, worth and integrity of Cleveland's first great merchant: Nathan Perry?

Western Reserve and Northern Ohio Historical Society—Tract No. 63.
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—THE—

Geographical History of Ohio.

AN ADDRESS

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THE GEOGRAPHICAL HISTORY OF OHIO.

When Columbus found America it was supposed he had reached the eastern coast of Asia. As discovery progressed, names intended for that continent were strung along the Atlantic. One of them, the West Indies, to-day reminds us of the error, as well as Indian, the common name for the aborigines.

It was by and by suspected that America was not Asia, but it was a long time before the reality of a vast continent was understood. Succeeding learned men made it consist of two very long and narrow bodies of land.

South America, coasted by Cape Horn, was first delineated with some accuracy, but North America not until very much later. The feeble colonies along the Atlantic grew slowly, and not until two hundred and fifty years did they really begin to push over the mountains, and there met other colonies from the interior of the continent. The South Sea trade led to many voyages of discovery, and many energetic captains sailed up and down the coast striving and continually hoping to find some strait to the supposed near coast of Asia.

We, in our day, read the early voyages as if the enterprising men who conducted them were voyaging purely for science and adventure, but, then, as now, business was energetic and commerce was reaching out its hands in every direction for larger profits. Only once did a romantic chevalier search for the visionary fountain of youth, and he may have thought that bottled it would be the most popular-of mineral waters and there were "millions in it."

Cartier entered the Gulf of St. Lawrence in 1534, but

returned to France to get a new outfit to pursue the new sea channel to the west. The next year he entered the river, but still looked for a passage to Asia. He thought deep Saguenay led to the Northern Sea and continued up the St. Lawrence. Stopped by the rapids he was the first European who made the tour of the mountain, and named the place "Mount Royal."

The Indians reported to Cartier that there were three large lakes and a sea of fresh water without end, meaning, no doubt, lakes of middle New York and Ontario Sea. Cartier and his king, the great Francis, supposed he was in Asia.

In a mercator map of 1569, the St. Lawrence is represented draining all the Upper Mississippi valley, while to the north-west is the eastern end of a vast fresh water sea (*dulce aquarum*) some five hundred or six hundred miles wide, of the extent of which the Indians of Canada, learning of it from the Indians of Saguenay, are ignorant. It looks on the map like Lake Huron, but careful geographers dropped this unfounded report of a great lake, and rightly. The Saguenay Indians no doubt meant the Lake St. John.

Quebec was settled in 1608. In 1615 Champlain reached Lake Huron by way of Ottawa River. On his return he crossed the lower end of Ontario, and met in battle the Iroquois. His allies, the Hurons, wished him to wait for five hundred men from the Eries, the tribe from which our lake took its name. His interpreter, Brulé, visited them and descended the Susquehanna to salt water, and is supposed to have visited the lake; I doubt it. He did not need to cross it to return to the French, and he could hardly have stood on the lake and seen its broad expanse. He reported to Champlain, who, in 1632, made the first map of the lakes. Lake Erie, unnamed, is little but a wide irregular river from Lake Huron, (*Mer Douce*) to Ontario (*Lac St. Louis*). Champlain's ideas of Erie were more likely derived from the north, where Long Point and islands make it look narrower than it does from the south.

The maps of other nations for a long time after show no practical knowledge of the interior, being quite constant dif-

ferences in grossest blunders. But in the meantime the French—"shut up," says the English geographer, Heylin, "in a few weak forts on the north of Canada,"—were really by missionaries and teachers, pushing far into the interior. The Jesuit map of Lake Superior, of 1671, is wonderful. In a map published by the Royal Geographer Sanson, in Paris in 1669, Lake Erie is not far from its true shape, and lake Chautauqua appears with a small stream—meant, I think, for a little of the Ohio, known from Indian report.

It is worth while to stop for a moment to glance at the then position of our State. Between it and the east are the Alleghanies, in those days a great natural barrier, and not inaptly called "Endless Mountains." It was to be nearly one hundred years before the whites were to cross them, proposing to drive away the French, but really to meet the most disastrous defeat of Braddock's field.

At the south was a broad river separating from Kentucky, and not until still later and many a "dark and bloody" fight was Virginia to assert its empire over an unknown northwest by calling it "Illinois county." Nor was New York to discover Ohio. All along through western New York, and controlling the easiest avenues, were the Iroquois, the "Romans of the new world," the conquerors of Ohio, who submitted to neither the English nor the French, and who long asserted an equality with either. The French were more sociable with Indians, but the introduction of the Iroquois to civilization was a battle with Champlain in 1608, which made the Hurons friends of the French, but lost them the conquerors of the Hurons.

The French had been pursuing their occupation, such as it was, over the peninsula north of Lake Erie, and established several posts around Lakes Superior and Huron and at Detroit, where was carried on a valuable trade. The routes north of the lakes or by the Ottawa, were the shortest, easiest and much the safest. All the while they were looking for larger things and full of schemes. Rumors of great rivers reached them, including some report of that which started from the country of

the Iroquois and gathered strength for its immense unknown course through distant lands.

No more resolute discoverer than La Salle ever came to New France. A young man, only twenty-three, he was of good family; lost his inheritance by joining the Jesuits, but had given up his intention of becoming a priest. One can see, however, that he had imbibed their enthusiasm for geographical extension, and turned to designs for commerce and the king their zeal for their order. His whole life is so harmonious in its unity that it gives color to the suggestion of Mr. Parkman that he had planned it before he came. He had a grant at once, through the influence of his brother, at La Chine, named, it is said, in ridicule of his plans for a route to China. He palisaded it, traded in furs, and studied with industry the Indian tongues, learning, it is said, seven or eight. The Indians who came there talked of the Ohio, a grand river which rose near Lake Erie, but after a journey requiring eight or nine months to follow, emptied into a vast sea. La Salle believed the sea to be the Gulf of California, then thought to communicate, by a broad passage at its north, with the ocean. Here was the passage to the commerce of the South Sea and valuable trade with nations along its banks. In 1667 he asked to be allowed to discover it. He had the privilege, but his company was merged with that of two missionaries, Galinée and Dollier. With them, in 1669, he visited the Iroquois. The river was in its old place, but the Iroquois were not inclined to have the Frenchmen penetrate their country, intercept their trade and supply the nations to their rear with the fire arms which made the Iroquois themselves omnipotent in battle.

They talked of the long, hard journey—almost impossible; of the Andastes, a terrible nation almost sure to kill them, and the still more terrible Shawnees. The courage of the missionaries failed them, and La Salle was obliged to turn with them to the north.

There has lately been published in Paris, by M. Margry, a series of documents which add much to our knowledge of him

In these volumes appear his plans, expenses, poverty, drafts upon his family and friends ; how he built upon Lake Ontario and Niagara, and planned to build on Lake Erie and further west.

In 1667 he was in France. He was already famous and of influence. His scheme was vast. He wished to penetrate to the great valley of our continent and lay there the foundation of powerful colonies "in a country temperate in climate, rich and fertile, and capable of a great commerce." He told the king "such a hold of the continent would be taken, that in the next war with Spain, France would oust her from North America." He was graciously allowed to pursue this vast enterprise, provided he did so at his own expense.

In 1679 he built the Griffin, the first vessel upon Lake Erie. He founded Fort Miamis upon the river St. Joseph, in southwest Michigan, and Fort Crèvecœur upon the Illinois, intending to there build a vessel to descend the Mississippi. The Griffin returned to bring supplies. He never saw her again. She was lost, he believed, by treachery, and he must return for succor. Arrived overland at Niagara, he found he had also lost a vessel with supplies from France. He reached Montreal May 6, 1680. His creditors had seized his property and his resources seemed entirely wasted. He learned by letter from Tonty, that the men left at Crèvecœur had deserted after destroying the fort, carrying away what property they could and destroying the balance. They also destroyed Fort St. Joseph and seized his property at Niagara. But La Salle was not disheartened. He started to succor Tonty and save the vessel on the Illinois. As he reached Crèvecœur, in the winter of 1680, all was silent ; the planks of the vessel were there and on one was written "*Nous sommes tous sauvages : ce 19, A. 1680.*" Was it prophetic that he had named the place Crèvecœur (Broken Heart)? Not at all. His first thought was, did A. stand for April or August, and where was Tonty. The resolute will and wonderful power of La Salle appear nowhere so strongly as in the narrative of the Illinois. There seems almost a direct triumph of mind over matter. He found Tonty at Michilimack-

inac, and in 1682-3 accomplished his purpose of descending the Mississippi to the sea. He returned up the river and to France, and in 1685 was in a sea expedition to found a colony at its mouth. The captain, against his protest, carried him by and landed him in Texas. He still persisted, with the men left with him, in the resolve to find the Mississippi, with great suffering and opposition on their part, but not at all daunted himself. A part of them revolted from the enterprise, and one of them shot La Salle, exclaiming: "Lie there Grand Bashaw," and that resolute will was still.

Such was the man, who, almost at the outset of his career, and when hardly twenty-seven, discovered the Ohio. There are no journals or maps of that discovery, and I have traced the man to enable us to judge of the manner in which he no doubt pursued that project. We left him with Galinée in 1669, sadly turning to the north. Of the captive guides furnished by the Iroquois, he got a Shawnee from Ohio, and persisted in wishing to seek that river. He shortly separated from the expedition. The opposition which we have related was not all. The Jesuits were jealous of his schemes—the only ones more vast and energetic than their own. Frontenac, the governor, says: "Their design, as appeared in the end, was to set a trap whichever path I took, or to derange everything; to place the country in disorder, from which they would not hesitate to profit and to ruin M. de La Salle."

Their annual reports are the main reliance for early Canadian history, and they purposely and sagaciously omitted all mention of his enterprises or discoveries, or even his name.

Until within a few years it has been said that La Salle did nothing for the next two or three years after he left Galinée. With such a man that was impossible. We have the briefest knowledge of what he did. His reports and his maps, known to be in existence as late as 1756, are apparently hopelessly lost. In the papers publishing at Paris is one resulting from conversations with La Salle in 1677, when he was in France, a too brief narrative. It sets forth La Salle's resolve to turn to

the south; that Galinée, a missionary, hoped to do good in the north, and in this hope left our hero. **“However,”* says the narrative, *“M. de La Salle continued his journey on a river which goes from the east to the west, and passed to Onontague, then to six or seven leagues below from Lake Erie, and having reached longitude 280 to 283 degrees, and latitude 41, found a rapid which falls to the west in a low, marshy country, all covered with dry trees, some of which were still standing. He was compelled to take to land, and following a height which led him away, he found some Indians who told him that far off the river lost itself in the lower country, and reunited again in one stream. He continued on the journey, but as the fatigue was great, twenty-three or twenty-four men, which he had brought there, left him by night, returned up the river and saved themselves, some in New York and some in New England.*

**“He was alone, four hundred leagues from home, where he returned, ascending the river and living on game, plants, and what was given him by the Indians.*

**“After some time he made a second attempt, on the same river,”* which he left below Lake Erie, making a portage of six or seven leagues to embark on that lake, which he left towards the north, going through Lake St. Clair. La Salle himself says in a letter of 1677: *“That year, 1667, and those following he made several expensive journeys, in which he discovered the first time the country south of the great lakes, and between them and the great river Ohio. He followed it to a strait, where it fell into great marshes, below 37° latitude.”*

A letter from M. Talon to the king, dated November 2, 1671, says: *“Sieur de La Salle has not yet returned from his journey to the southward of this country.”*

A memoir of M. de DeNonville, March 8, 1688, says: *“La Salle had for several years before he built Crèveœur, employed canoes for his trade in the rivers Oyo, Oubache and others in*

*NOTE.—A more full discussion of these passages, by Colonel Charles Whittlesey, will be found in Tract No. 38 of the Historical Society, at Cleveland.

the surrounding neighborhood, which flow into the river Mississippi."

A plain meaning of all this is that La Salle entered the Ohio near or at one of its sources, I believe at Lake Chataqua, six or seven leagues below Lake Erie, and followed it to Louisville. He was engaged in the beaver trade, and in 1671 had a credit at Montreal, payable in beaver. We may be pretty confident that, with his twenty-three or twenty-four men and several canoes, looking for beaver-skins, he did not neglect the Mahoning River, first called Beaver creek.

La Salle's latitude is bad; we would expect that. Joliet's manuscript map of 1674 lays down the Ohio marked "Route of the Sieur de La Salle to go to Mexico." The unpublished map of Franquelin of 1688 lays down the Ohio more correctly than it appeared in published maps for sixty years. The discovery was the basis of the French claims to Ohio, and La Salle's likeness is one of the four great discoverers of America in the Capitol at Washington. But the knowledge gained by La Salle to be in a great measure lost. The English, stopped by Indians and mountains, were not to settle here. The west and northwest were safer territory for the French. The Iroquois roamed over Ohio, warred with the tribes beyond, even to the Mississippi. The Wabash and Ohio became confounded, often laid down as "Wabash or Ohio," and most often made running almost parallel with the lake and just about on the high land in Ohio which divides the streams of the north from the south. The magnificent sweep of the Ohio, which embraces our State on the east and south, was lost. The lake had various fortunes. La Hontan made it run down like a great bag half way to the Gulf, but that being in time changed, its south shore was drawn nearly east and west instead of to the southwest westward. No subsequent French writer was so sensible and intelligent as Charlevoix, yet in his great work of three quarto-volumes on New France our territory hardly appears, and on the south of Lake Erie in his larger map of it, in 1744, is the

legend: "*Toute cette coste n'est presque point connue*"—this coast is almost unknown.

As early as 1716 the governor of Virginia proposed to the home Government to seize the interior. No attention was paid to it, but about 1750 Pennsylvania traders were pushing over the mountains and the French traders from the west. In that year the Ohio Land Company sent Gist to survey the Ohio. English traders were shortly after at Pickowilliny, Sandusky and Pittsburgh, but not safely so. The French were the strongest. In 1749 Celeron placed his lead plates on the Ohio. In 1753 the French crossed Lake Erie, established Presque Isle and expelled the English from Fort DuQuesne at Pittsburgh. Washington made his appearance to know what the French were doing. The traders had made no addition to science or geography, but they had called attention to the country. But the military expeditions were to rediscover it.

Celeron's map lays down the Ohio quite creditably, but the legend along the lake is: "All this part of the lake is unknown." Just the mouth of the Beaver appears. He expelled English traders from Logstown, a little above the Beaver. The great geographer, D'Anville of France, in 1755 lays down the Beaver, with the Mahoning from the west, rising in a lake, all very incorrectly, with Lake Erie rising to the northeast like a pair of stairs and the Ohio nearly parallel to it.

The map published in 1754 with Washington's report takes good account of Great Beaver creek—Logstown just above it; opposite, on the Ohio, a fort; Delawares on the west at the mouth; Kuskuskas above; and above that, Owendos' town, "Wyandot." This is the first representation of your river, as far as I know. The mixed state of the Indians at that time appears in Celeron, who found in Logstown Iroquois from different places, Shawnees, Delawares, also Nepissings, Abenakes and Ottawas.

Being a convenient way of passing to the lake, a trail as an avenue of commerce preceded the canal, and that the railroad.

Evans was to draw and Franklin to publish, in 1755, at Phil-

adelphia, a map plainly in demand by traders, and from information given by them. At the mouth of the Beaver is a Shingoes' town; a trail up to the forks finds the Kuskuskas; a trail to the east leaves it for "Wenango" and "Petroleum;" the trail to the west goes to "Salt Springs," and where farther does not appear.

In his "Analysis," Mr. Evans says: "Beaver creek is navigable with canoes only. At Kushkies, about sixteen miles up, two branches spread opposite ways—one interlocks with French creek and Cherage, the other westward with Muskingum and Cuyahoga. On this are many salt springs about thirty-five miles above the forks. It is canoeable about twenty miles farther. The eastern branch is less considerable, but both are very slow, spreading through a very rich, level country, full of swamps and ponds which prevent a good portage, but will no doubt in future ages be fit to open a canal between the waters of the Ohio and Lake Erie."

A map often reprinted, and the one which was made the basis of the treaty of peace after the Revolution, was that of John Mitchell, London, 1755.

Kushkies is said to be the "chief town of the Six Nations on the Ohio, an English factory." On the east branch are "Owendots." Pennsylvania reaches its protection over the whole of the Mahoning.

My purpose to outline discovery is nearly ended. In 1760, with Quebec, all New France was surrendered to the English, but new wars with Indians were to follow. Hutchins, Geographer-General to the United States, who introduced our admirable land system, was with Bouquet in 1764. On his map, between Kuskuske and Salt Lick Town, on the west of the river, appears "Mahoning Town," the first appearance in the maps of the name.

The subsequent history of Ohio is familiar. That of the Reserve grew out of that ignorance which supposed the continent narrow. King Charles granted in 1660 to Connecticut a tract seventy miles wide and over three thousand long. The money

for the Reserve became the school fund of Connecticut, and led by the example, to our admirable system of free schools, so that the ignorance of years ago leads to the wisdom of this.

"There's a divinity that shapes our ends,
Rough hew them as we will."

The error of making the south shore of Lake Erie east and west came to a curious end. When the association of gentlemen known as the Connecticut Land Company were about to buy the Reserve, they agreed with a prospective competitor to let it have the excess over three million acres. This was the Excess Company, but there was no land for it, and the error of one hundred years led to considerable financial disaster.

I ought to mention, as a matter of curious history, the map of John Fitch, of steamboat memory. He spent considerable time in surveys within the bounds of Ohio and Kentucky, and had previously traveled the country as a prisoner among the Indians. In 1785 he made a map of the "Northwest Country," containing original and accurate information. He prepared the copper plate, engraved it himself, and printed it with a cider press. He was then living in Bucks county, Pa., and sold the map at six shillings per copy to raise money enough to pursue his inventions relating to steamboats.

We have now reached the period of settlement and can take a retrospect.

From the discovery of the continent in 1494 it was one hundred and seventy-five years to the pioneer discovery of Ohio. In eighty-five years more both France and England set to work in earnest to make good their claims to it. In thirty-four years more England had beaten France, America had beaten England, and the first permanent settlement had been made in Ohio. It took two hundred and ninety-four years to reach this point. There are but ninety-two years left to 1880 for the pioneers of Ohio; but what a fruition to their work! The solitary settlement has become a mighty nation of three million people, as large as the whole United States in the Revolution, and how much stronger and with what an abundance of wealth

and comfort—a centre of intelligence and the home of Presidents!

It is a wonderful review. The pioneers found the State covered with large forests, almost without exception requiring the severest labor to remove; and the change, all within a possible lifetime, seems amazing. The world cannot show its parallel, and when one thinks seriously it will be found to be one of the most interesting and important events in the history of man.

Peace as well as war has its victories. Yours is only one of many pioneer associations. It has been directed with unusual wisdom, and by the pen and press you are making permanent record of life and its changes in this great movement, so that your descendants and successors shall know something of that past, nearest and most interesting to them.

We can only live over in stories the life of the pioneers. But theirs was sturdy independence and severe labor, with least encouragement, and

“Haply from them the toiler, bent
Above his torge or plow, may gain
A manlier spirit of content,
And feel that life is wisest spent

Where the strong working hand makes strong the working brain.”

Western Reserve and Northern Ohio Historical Society.—Tract 64. November, 1884.



Map and Description

—OF—

Northeastern Ohio

—BY—

Rev. John Heckewelder.

1796.

Reprinted from the Magazine of Western History, Cleveland, Ohio.

CLEVELAND, O.

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John Heckewelder.

MAP AND DESCRIPTION OF NORTHEASTERN OHIO, BY
REV. JOHN HECKEWELDER, IN 1796.

Among the many manuscript treasures of the Historical Society at Cleveland is a description of Northeastern Ohio, by Rev. John Heckewelder, the famous Moravian missionary, accompanied by a map also drawn by him. They were presented to the society by the daughter of General Moses Cleaveland.

Father Heckewelder was born in England in 1743. His father was born in Moravia, and went to England in 1734 as an exile in the service of the Moravian Church.

When John was ten years old he accompanied his parents to Bethlehem, Pennsylvania, where was a Moravian Indian mission. There he went to

school and learned to be a cedar cooper. He desired to be an evangelist to the Indians, and in 1762 accompanied Post to the Tuscarawas River and began his labors near the present village of Bolivar, in the county in Ohio named from that stream. But Pontiac's war broke up the mission, and Heckewelder, like the evangelists of old, sometimes pursued his trade at Bethlehem and sometimes did mission service.

In 1773 he settled the second time in the Muskingum valley. There were built Schönbrunn, Guadenhütten, Lichtenau and Salem, flourishing towns of Moravian civilized Christian Indians. There, in 1780, he married Sister Sarah Ohneburg, and this was no doubt the first marriage between white persons solemnized within the limits of the State of Ohio. Their eldest daughter, Johanna Maria,* was born in April, 1781, and for a long time was supposed to be the first white child born in Ohio.

When the Revolution came on, the too peaceful converts, being unwilling to join either side in the border warfare of the day, were suspected by both. In 1781 they were carried by the British, as prisoners of war, to Upper Sandusky. Eventually they were set at liberty, but not permitted to return to the Muskingum. That Heckewelder was a prisoner and compelled to settle near Detroit, was a double preservation of his life. The faithful Indians who returned to the Muskingum were most inhumanly massacred by Americans, and in the language of Johanna Heckewelder, "in one night a whole Indian congregation was translated from earth to heaven." An expedition followed on to Upper Sandusky to kill the balance of the praying Indians, but the second removal had taken place, and a new Guadenhütten had been founded near Detroit.

In 1786 they returned and settled on the Cuyahoga River at Pilgerruh (Pilgrim's Rest), which place Heckewelder left October 8, 1786, as appears by his manuscript here printed. He returned to Bethlehem, where this manuscript was written.

He still led an active, useful and honorable life, and in 1801 settled for the fourth time in Ohio, at Guadenhütten. He lived here nine years, having superintendence of 12,000 acres of land, granted by Congress to the Moravians, and acting as postmaster, justice, and judge of Common Pleas.

In 1810 he returned again to Bethlehem. Says his biographer: "In the beautiful graveyard of Bethlehem, where rests so many a child of the forest, the red man's faithful friend is buried, and over his grave a marble

*Her own very interesting biography is elsewhere published in this number of the Magazine.

slab bears this simple inscription: 'In memory of John Heckewelder, who was born March 12, 1743, in Bedford, England, and departed this life January 31st, 1823.' " Mr. Heckewelder explains his map in the following language which is given *verbatim et literatim*.

DESCRIPTION OF THAT PART OF THE WESTERN COUNTRY COMPREHENDED IN MY MAP; WITH
REMARKS ON CERTAIN PARTICULAR SPOTS &C.

Altho the country in general containeth both arable Land & good Pasturage: yet there are particular Spots *far* preferable to others: not only on account of the Land being here superior in quality: but also on account of the many advantages presenting themselves.

As the first place of utility between the Pennsylvania Line: (yea I may say between Presq' Isle) and Cujahaga; & in an East and West course as the dividing Ridge runs between the Rivers which empty into the Lake Erie; & those Rivers or Creeks which empty into the Ohio: (& which Ridge I suppose runs nearly Paralell with this Lake, & is nearly or about 50 miles distance from the same): Cujahaga certainly stands foremost; & that for the following reasons.

- 1) because it admits small Sloops into its mouth from the Lake, and affords them a good Harbour.
- 2) because it is Navigable at all times with Canoes to the Falls, a distance of upwards of 60 Miles by Water—and with Boats at some Seasons of the Year to that place—and may without any great Expense be made Navigable for Boats that distance at all times.
- 3) because there is the best prospect of Water communication from Lake Erie into the Ohio, by way of Cujahaga & Muskingum Rivers; The carrying place being the shortest of all carrying places, which interlock with each other, & at most not above 4 miles.
- 4) because of the Fishery which may be erected at its mouth, a place to which the White Fish of the Lake resort in the Spring, in order to Spawn.
- 5) because there is a great deal of Land of the first Quality on this River.
- 6) because not only the River itself, has a clear & lively current, but all Waters & Springs emptying in the same, prove by their clearness & current, that it must be a healthy Country in general.
- 7) because one principle Land Road, not only from the allegheny River & French Creek: but also from Pittsburg will pass thro that Country to Detroit, it being by far the most level Land path to that place.

I will now endeavor to give an account of the Quality of the Soil of this Country: and will begin with the Land on the Cujahaga River itself.

Next to the Lake the Lands in general lay in this part of the Country, pretty high, (say from 30 to 60 feet high) except where there is an opening by a River or Stream. These banks are generally pretty level on the top, & continue so to a great distance into the Country. The Soil is good and the Land well Timbered either with Oaks & Hickory, or or with lofty Chestnuts.

On the Cujahaga River are, I verily believe, as rich Bottoms, or intervals, as in any part of the Western Country. The Timber in these are either Black Walnut, or White Thorn Trees, intermixed with various other Trees as Cherry, Mulberry, &c. The ground entirely covered with high Nettles.

In such Bottoms, somewhat inferior to the above, the Timber is principally lofty Oaks, Poplar, or Tulip tree, Elm, Hickory, Sugar Maple yet intermixed with Black Walnut, Cherry, Mulberry, Grape Vines, White Thorn, Haw-bush &c &c Ash &c Wild Hops of an excellent quality grow also plentifully on this River.

The richest Land on this River lieth from where the road crosseth at the old Town downwards. Within 8 or 10 miles of the Lake the Bottoms are but small, yet the Land rich, from here upwards they are larger & richer. At the old Moravian Town as marked on my Map, they are exceedingly rich. Some low bottoms are covered with very lofty Sycamore Trees.

The Land adjoining those Bottoms within 10 or 15 Miles of the Lake, is generally ridgy, yet level & good on the top, excellently Timbered. Thro' these ridges run numbers of small Streams, & sometimes large Brooks; the water always clear and with a brisk current.

I have traced small Streams to their Sources, where I have found a variety of excellent Springs lying off in various directions. (see the run at the Moravian Town).

From these Lands upwards towards the old Town, & along the path towards the Salt Spring; the Country is in general pretty level; just so much broken as to give the Water liberty to pass gently off.

There is a remarkable fine Situation for a Town, at the old Cujahaga Town; & there can be no doubt of a large Trading Town being established here, as both a Road to Sandusky & Detroit crosses here: as also the carrying place between the two Rivers Cujahaga & Muskingum must be at this place.

Some miles above this Old Town there is a fall in the River. The Rock which runs across may be about between 20 & 30 feet high. No Fish can ascend higher up, or get over this Fall, tho there are Fish above it. Just under the Falls the Fish crowd together in vast numbers, & may be taken here the whole year round. At the more Easterly Crossing of this River as the Path runs; (the distance of which I do not exactly recollect, but think it between 15 & 20 miles) there is a most remarkable large Square Rock in the Middle of the Stream, which may at a future day, well answer the Pier of a Bridge. (see  this mark on the map) at this place there is a pretty large Plain on the Northwest Side of the River—and in several other places in this Country there are similar Plains or Flatts. On these the Land is rather thin in comparison to the other: yet not so that it would not bear good Grain.

There are also some Swamps in this Country, yet I have not seen one, which might not be cultivated, and make good Meadows.

Here and there I observed small groves of Pine, but never went to see of what kind they were. I supposed them only to border on some small Lake or Pond.

There are some beautiful small Lakes in this Country, with water as clear as Chrystall, & alive with Fish. In these Lakes as well as in Cujahaga River Water Fowl resort in abundance in Spring & Fall.

Between the head Waters of Beaver Creek & the head Waters of Cujahaga, the Country is rather more broken, yet not too much for tillage. The Land is good.

From the big Deer Lick on Beaver Creek to the Salt Springs (a distance of about 16 miles) the Country is rather of a colder Nature; but thinly Timbered, & much of a wet Clay ground. A comp'y of gentlemen have obtained some Years ago a Title to this Tract of Country comprehending the Salt Spring.

I cannot leave Cujahaga without mentioning one Circumstance, viz. That when I left the Moravian Town on that River which was the Eighth day of October 1786, we had not then had one Frost yet, whereas all the Weeds & bushes had been killed by the Frost some Weeks before, on the dividing Ridge. Ind'n Corn, this year planted at the above mentioned place on the 20th day of June ripened before the Frost set in.

The Cujahaga Country abounds in Game, such as Elk, Deer, Turkey, Raccoons &c In the Year 1785, a Trader purchased 23 Horseload of Peltry, from the few Indians then Hunting on this River—

Of the Country to the Southward of Cujahaga & between the dividing Ridge & Tuscorawas, where the line strikes across, I cannot give a precise description, having only seen this Country in part, yet what I have seen has been pretty generally good, except it be some barren Plains, and large Cranberry grounds. Otherwise off the River, and on the path from thence to Mahoning Old Towns, I saw vast bodies of very rich Upland, well Timbered, sometimes level Land, & then broken, especially the latter on the head Waters of the Beaver Creek towards Mahony.

From Tuscorawas Northerly for 12 or 15 Miles I thought the Land very good, & observed extensive Meadows on the Banks of the Muskingum. But I think near the dividing Ridge the Country is rather Colder. The Country is in some places off the River interspersed with round Nobs or Hills, with short yet thick Trees upon them. The water of this Country is also clear & good.

I will insert the description the late Geographer to the United States gives to this part of the Country, copied from a Pamphlet he had printed in London in the Year 1778, which runs thus:

"The Muskingum is Navigable with large Batteaux or Barges to three Legs and by small ones to a Lake at its head. From thence, (namely from three Legs) to Cujahaga, (the Creek that leads, to Lake Erie) the Muskingum is muddy, and not very swift, but no where obstructed with Falls or Rifts. Here are fine uplands, extensive Meadows, Oak and Mulberry Trees fit for Ship building, and Walnut, Chestnut, & Poplar Trees suitable for domestic service—Cujahaga furnishes the best portage between Ohio and Lake Erie: at its mouth it is wide enough to receive large Sloops from the Lake. It will hereafter be a place of great importance."

JOHN HECKEWELDER.

Bethlehem Jan'y. 12th 1796.

MR. JOHN MCNAIR ESQR.

SEVENTEENTH
ANNUAL MEETING

OF THE

WESTERN RESERVE

AND

Northern Ohio Historical Society,

AT

CLEVELAND, OHIO,

MAY, 1884.

TRACT NO. 65.

CLEVELAND, O:
WILLIAM W. WILLIAMS, 145 ST. CLAIR STREET.
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1884-85.

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COL. CHARLES WHITTLESEY.

VICE PRESIDENTS.

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To MAY, 1885.

JOHN W. ALLEN,

JOSEPH PERKINS,

CHARLES WHITTLESEY.

To MAY, 1886.

LEVI F. BAUDER,

PETER HITCHCOCK,

HENRY N. JOHNSON.

To MAY, 1887.

C. C. BALDWIN,

STILES H. CURTISS,

RUTHERFORD B. HAYES.

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C. C. BALDWIN.

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D. W. MANCHESTER.

TREASURER.

DOUGLASS PERKINS.

LIBRARIAN.

DAVID HOLMES.

The Life and Annual Members are published herewith. The Corresponding Members will be published in the next annual report.

ANNUAL MEETING.

The sixteenth annual meeting of the Society took place at its rooms, on the evening of May 13, 1884.

In the absence of President Whittlesey, D. W. Cross presided.

The annual report of the secretary was read by C. C. Baldwin, and is hereto appended. The report of the treasurer was also submitted.

The reports were approved, and that of the secretary ordered to be printed.

The following were elected curators for the term expiring 1886: Levi F. Bauder, Peter M. Hitchcock and Henry N. Johnson. For the term expiring in 1887: Charles C. Baldwin, Stiles H. Curtiss and Rutherford B. Hayes.

The following resolution was then adopted:

Resolved, That the hearty thanks of this Society be tendered to our late librarian, Henry N. Johnson, who in many other ways than by his simple duty has done very much for the Society.

The meeting then adjourned.

C. C. BALDWIN, *Secretary*.

CURATORS' MEETING.

After the meeting of the members the curators met and elected the following officers: President, Charles Whittlesey; Vice Presidents, D. W. Cross, D. P. Eells, J. H. Sargent; Corresponding Secretary, C. C. Baldwin; Recording Secretary, D. W. Manchester; Treasurer, Douglas Perkins; Executive Committee, Peter M. Hitchcock, Stiles H. Curtiss and C. C. Baldwin.

The curators meeting then adjourned.

D. W. MANCHESTER, *Secretary*.

THE SECRETARY'S REPORT.

LIBRARY.

The additions to the library from May 1, 1882, to April 30, 1883, are: pamphlets and unbound books, 1,156; bound books, 351. From May 1, 1883, to April 30, 1884: pamphlets and unbound books, 792; bound books, 207. A valuable addition to the library is a complete set of the "New England Historical and Genealogical Register" from its commencement, in 1846, to the present time, numbering thirty-seven volumes in all. The first twenty-five volumes were presented by Mr. Charles O. Scott of this city, and the remainder by the secretary.

There have been added also a number of county histories and atlases. We have, however, only about twenty atlases out of seventy or eighty in existence. Our library in genealogy is valuable, although it has cost very little money, and is to be recommended to every one who desires to know something of his ancestors and family.

MUSEUM.

The additions to the museum have been unusually large, owing mainly to the exertions of Mr. H. N. Johnson, who has made a study of Kelley's Island, and a thorough collection of its antiquities. There is also on exhibition, in a case by itself, a very fine collection from the mounds and fields of Southern Indiana, consisting of stone implements, pottery, and ornaments of various materials. The collection of agricultural implements is very fine, including stone spades of chert, fifteen inches long. The material apparently came from Flint Ridge, in Licking County, O., although the articles were found hundreds of miles to the west and southwest. They were collected by Mr. Williams of Chagrin Falls. A number of friends have contributed a life-like oil portrait of the late Joshua R. Giddings, painted by the late Mr. Alonso Pease and

purchased of his widow. There has been on exhibition in the rooms for some months a painting by Mr. Machen, late of Toledo, but now of Detroit, representing Fort Industry and the site of Toledo in 1812. It presents the foot of the island in its original state, with the west bank of the Maumee, the fort on Swan Creek at the back, and is not only a pleasing picture, but it is said by old pioneers capable of judging to be very accurate. It is now being engraved for a historical work on Toledo and vicinity.

The additions to the museum from May 1, 1882, to April 30, 1883, were 1,178; from May 1, 1883, to April 30, 1884, were 1,025.

VISITORS.

It is hard to tell with exactness how many persons have visited the rooms during the past year. It is evident that more than five thousand persons have visited the museum, and the general expression was one of satisfaction and surprise.

Mr. Johnson's official duties as receiver of a corporation have obliged him to resign his office as Librarian of the Society. Mr. C. E. Wheeler has been temporarily employed in his place. In parting with Mr. Johnson it is impossible to express his usefulness, intelligence, good sense, and value to the Society.

The report of the Treasurer shows a gross income from all sources during the last two years of \$2,021.37, of which \$360 was from annual membership, and \$376 was donated especially to the survey of the glacial terminal moraine. The balance on hand in May, 1882, was \$8.40. It is now \$10.37.

TERMINAL MORaine.

The most important enterprise undertaken by the Society for some time has been the survey of the limit of the glacial area in ancient time. The work was done by Professor G. Frederick Wright, of Oberlin, whose learning in similar researches has already given him distinction among geologists. His expenses only were paid. It was found that the upper part of the State was entirely covered by a continuous sheet of ice, and that the surface, except where it had been changed by streams or the lake, is now just as it

was left by the ice. The southern limit is marked by an unusual accumulation of material brought from north of the Great Lakes. The terminal moraine enters Ohio in Columbiana County, and by irregular lines of progress, leaves it in Brown County and enters Kentucky. It enters Indiana, running northeasterly until the centre line of that State is reached, and then turns to the southwest. The Ohio was dammed up and a large lake existed there covering a fair share of the southeastern part of our State, and placing the site of Pittsburgh three hundred feet under water. Man existed on the American continent while this ice sheet covered our territory, and thousands of relics of his life have been found in New Jersey. No doubt many will in time be found in our State. The surface, soil, capacity for agriculture and the modes of life of the people are strongly marked by this line, and the investigation has proved equally interesting to the historian, scientist, statesman and agriculturist. The result of the investigation has been published in a volume of eighty-eight pages, with thirteen maps, plans and cuts, as tract No. 60, and it has also been paged as a separate volume.

The following persons made contributions to a special fund for this investigation: Jarvis M. Adams, \$200; Dan. P. Eells, \$50; Joseph Perkins, \$50; T. P. Handy, \$25; D. W. Cross, \$50.

PUBLICATIONS.

The publications of the Society since May, 1882, have been: Tract, 57, May, 1882. The Annual Meeting of May, 1882; Tract 58, Biography of Ephraim Kirby, by Theodatus Garlick, M. D.

Tract 59, September, 1883, Ohio Surveys, by President Whittlesey.

Tract 60, April, 1884, The Glacial Boundary in Ohio, Indiana, and Kentucky, by Professor G. Frederick Wright.

The Society has prospered during the last two years, although its chief executive officers have been unable to give it the usual attention. Meanwhile the usefulness of the Society has been extended, especially by its library and museum, and the public interest in history and archæology has much increased.

There has been a marked change in the attention given to such matters in Cleveland within a few years, and there seems every reason to believe that the Society, which has safely passed the stage of infancy, will be much better supported and equipped in the future. The work to be done here may be so divided that the doing of each may not only be useful to the Society, but interesting, profitable and honorable to him who does it. The number of our annual members should be much increased, committees responsible for branches of service should be appointed, and literary meetings held which could not fail to be interesting.

In conclusion I must refer to the honored dead who have left our body and whose memory it especially behooves a Society like ours to perpetuate. Our deceased life members are Hon. John D. Baldwin, a distinguished scholar and writer, and a former member of Congress, residing in Worcester, Mass., and Mr. Henry C. Blossom, a highly respected and much loved merchant of this city; and O. H. Marshall, of Buffalo, an elegant writer and fine scholar in history, as well as an influential citizen of that city. Three annual members have died—Lyman Little, M. D., who, at the time of his death, was curator of our Society; Mr. William H. Price, president of the Cleveland Gas Company, and a man of mark in other matters; and Mr. Amasa Stone, a gentleman of wide experience and success in large enterprises of all kinds. Hon. Samuel Williamson, the late president of the Society for Savings, has always taken a kind, intelligent, and effective interest in the Society, and was, up to two years ago, for some years treasurer.

C. C. BALDWIN, *Secretary*.

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BIOGRAPHIES.

John Denison Baldwin, of Worcester, Mass., died July 8, 1883. He was a life member of our Society. He was born September 28, 1809, in Stonington, a son of Daniel Baldwin, and of the sixth generation from Sylvester Baldwin, who died in June 1637, on board the ship *Martin* bound for New England, through John, the youngest son, who settled in Stonington. Possessed of an active mind, he acquired by his own efforts a liberal education, studying in the divinity and law schools. He received the honorary degree of A. M. from Yale College. In 1833 he settled in North Bradford as a preacher. He acquired the French and German languages, and by 1844 had given special attention to archæology, wrote much for magazines and newspapers. He then became editor of the *Charter Oak*, an anti-slavery newspaper of Hartford, and afterwards of the *Commonwealth*, of Boston. In 1859 he became editor and proprietor of the *Worcester Spy*, a very old paper, which then seemed in its old age, but under his care became vigorous and again successful. He continued in the ownership of the paper, with his

sons, until his death. While pastor of a church in North Killingly, Conn., he was elected to the legislature as a Free-soil member, and reported a bill for normal schools, which became a law in 1850. He was also instrumental in organizing the Free-soil party. By the time he was in Worcester he had become a widely known and representative man. He was a delegate to the Republican convention in 1860, and was elected in 1862 to Congress, and re-elected for two terms. He was a diligent and thorough member. During the last term, his report and speech on the international copyright attracted much attention. Mr. Baldwin was the author of 'Prehistoric Nations, or Inquiries Concerning Some of the Great People, and Civilizations of Antiquity, and their Relations to a Still Older Civilization of the Ethiopians or Cushites of Arabia', a book of much learning, published by Harper & Brothers in 1869. In 1872 the same firm issued a second by him, 'Ancient America in Notes on American Archæology.' The last is of most interest to our State, and was indirectly the occasion of his connection with our Society. It was a very timely work, well illustrated, and did much to foster the present wide and general taste for American Archæology. Although many learned men have since written, it still justly maintains its high reputation. It covers the field in America as well as a book of the size can, and bears the marks of his genius—an active, energetic mind, distinguished by good sense and power. He was always marked by wide intelligence in matters of all kinds, science, politics, religion, or history. He was one of the first Americans in the country to take pictures by the daguerreotype process. Besides the above publication and his newspaper work, he published many articles in magazines, quite a number of addresses, sermons and speeches. In 1847, there appeared a volume 'Raymond Hill and Other Poems,' of some merit, and three books on genealogy. Two entitled, 'John Baldwin of Stonington, and His Descendants,' and 'Thomas Stanton of Stonington, and an Incomplete Review of His Descendants,' were privately printed. With Rev. William Clift, he was author of a much larger book, 'A Record of the Descendants of Captain George Denison, of Stonington, Conn.' Mr.

Baldwin's learning, accomplishments and usefulness were widely varied in his life, and he was widely mourned and honored at his death. He married, April 3, 1832, Lemira Hathaway, of Dighton, Mass. He left surviving him two sons, John Stanton Baldwin and Charles Clinton Baldwin, who continue the publication of the *Spy*.

C. C. B.

Henry C. Blossom, one of the earliest of our life members, was born in Chester, Geauga County, Ohio, Nov. 16, 1822. His parents were Orrin and Laura (Fellows) Blossom. His father came from Canandaigua, New York. He received an ordinary education and then came to Cleveland and became a hardware clerk. Five years after he became a member of the firm of William Bingham & Co., and continued in that connection for thirty-five years until his death. In connection with the firm he has been very prominently and successfully connected with the business growth of Cleveland. He died in Hamburg, Germany, August 18, 1883. He married, in 1850, Emma Louisa Nash, of Willoughby, who died before him, and left two children—a son, Henry S., a member of the same firm, and a daughter, Josie C., who married C. Clark. Mr. Blossom was a quiet but very well known gentleman. His judgment was excellent in or out of business, and his whole bearing inspired confidence. Nay more, it invited it, and few probably gave to friends and acquaintances more often confidential advice as to their affairs. He had a great kindness and tenderness which was felt and relied upon by his business acquaintance. His was a decided character, and his characteristics were those which especially commended him to the affection of others. The writer has examined many letters and resolutions, and the traits marked are generally the same. All felt first that he was kind and warm-hearted as a man, and true and sincere as a friend. His business associates recognized by resolution, after his death and by knowledge in his life, his uniform benevolence, his generous hospitality, his large social nature and genial companionship. He was a member of the second

church, and his influence as a citizen was uniformly for what was just and right.

C. C. B.

Lyman Little, M. D., was born at Morristown, Vt., Sept. 8, 1811, and died at Cleveland, July 31, 1883. His parents, David and Lucy Little, came from Connecticut and settled in Morristown, having a family of eleven children, all of whom arrived at the age of maturity. Lyman was a close student, and naturally became a teacher. He preferred the profession of medicine. In due time he gained his diploma and practiced twenty years, most of the time at Zanesville, in this State. He took high rank. During the war he was commissioned by Governor Tod to special army medical and surgical duty, and his reports were excellent. He was a man of strong mind, a clear thinker, independent in thought, and accurate in conclusion. His whole life was devoted to scientific study and reading. His life was active and useful. Of late years he retired from his profession and resided in Cleveland with a handsome competency. He took quite an active interest in our Society, and at his death was one of our curators. He displayed in the case of the Society the same accurate, acute good sense, which characterized his professional and business life. He married Sept. 22, 1836, Elizabeth G. Keyes, of Sheldon, Vt., daughter of Judge Eluathan Keyes, there from Hartford, Conn. Their one child, Sarah Keyes Little, survives, wife of John Tod, Esq., one of our life members. He married for his second wife, Cynthia S. Hunt, of Vermont, who survives.

C. C. B.

William H. Price was born in Freedom, Cattaraugus County, New York, January 18, 1818. He was the son of William Price, who settled there from New Jersey, and his wife, Elsie Dow, who was from Vermont. When a boy he was brought to Ohio. He studied law in Painesville, with the late Judge Reuben Hitchcock, and was admitted to the bar, but his health would not permit the confinement and he became a merchant.

In 1856, he removed to Cleveland as a wholesale merchant in Yankee notions. At the end of ten years he retired from the firm. In 1868, he was elected President of the Cleveland Gas Company, and held that position at his death. Mr. Price was a gentleman of quick and great intelligence, a clear and convincing speaker and thinker, a terse and vigorous writer. He was charming in conversation. Everything he did bore the impress of a superior mind. He had a hearty interest in public affairs and although not a politician for the sake of politics, frequently made his views felt in matters of education, charities or improvements. He exercised an active influence for what was for the best interests of morals and religion, education or charities. Whatever he felt interested in he advocated with activity of mind and body, which always characterized him. He was in consequence of this a recognized character, permanently connected, at various times, with the city Board of Education. He was president of the Trustees of the Northern Ohio Lunatic Asylum, and at his death president of the Infirmary Trustees. He was one of the committee to draft the constitution of the American Gas Light Association, and a vice-president from 1873 to 1879, when he succeeded General Charles Roome of New York, as president, and was succeeded in 1881 by General Hickenlooper, of Cincinnati. The American Gas Light Journal states that he was one of the foremost men in the gas fraternity. After a long struggle with disease, he died June 8, 1883. He married, in 1843, Miss Martha Guild, who died before him. He had a son, William A. Price, and a daughter, Laura, wife of Pierson D. Briggs, all of this city.

C. C. B.

The late O. H. Marshall, of Buffalo, N. Y., was a life member of this Society. When it was proposed by us in 1872 that the United States should purchase the historical papers of *M. Pierre Margry*, at Paris, Mr. Marshall entered vigorously into the project. He was a leading member and an officer of the Buffalo Historical Society, who, in his researches in Europe, had seen some of the documents collected or translated by

Margry. Their value to the history of the United States was fully appreciated by him. Mr. Marshall's reputation as an historian rested upon the most solid foundation. His published papers embraced the following: "Champlain's Expedition Against the Onondagas, 1613;" "Charter of Charles the Second to the Duke of York, 1664;" "La Salle Among the Senecas, 1669-1670;" "Voyage of the Griffin, 1679;" "Marquis De Nonville Against the Senecas, 1687;" "Celoron's Expedition to the Ohio River, 1749;" "Discovery and Settlement of the Niagara Frontier." From his early youth he was a resident of the city of Buffalo, where he died on the eleventh of July, 1884, at the age of seventy-two years. The eulogies and other public proceeding on his demise show that a community may feel the loss of an active private citizen more deeply than that of a public character. Mr. Marshall was by profession a lawyer, engaged principally upon questions of real estate. He steadily declined all offers of office beyond those of local institutions for charitable or other purposes for the improvement of his fellow citizens. He was for a long time a trustee of the Buffalo Savings Bank and of the Asylum for Indian Orphan Children, President of the Grosvenor Library, and one of the managers of the Society of Natural Science. The Buffalo Historical Society was originated in his office, and had his unfaltering support so long as he lived. It was in the line of history that his literary talents became most conspicuous. His papers on that subject are clear, perspicuous and elegant compositions. As an authority he was consulted by Francis Parkman and William L. Stone. The latter gentleman has published an eulogy in the October number of the Magazine of American History, in which it is said: "He was among the few who are greatly beloved in life and deeply regretted in death." Before the Buffalo bar William C. Bryant remarked that "he sustained all the relations of life with exceeding grace and dignity; he was judicious, loving and kind, with a heart as open as the day to melting charity."

C. W.

Amasa Stone was born in Charlton, Worcester County, Mass., April 27, 1818. His father had the same name and was

descended from an old family of Waltham, Mass. At twenty he joined his brother in building a church. In 1839 he became foreman for his brother-in-law, Mr. Howe, in erecting two churches and several houses. He then engaged with Mr. Howe in building the Howe truss bridges. From that time on he was engaged in building bridges, depot buildings, and railroads. In 1845 he was superintendent of the New Haven, Hartford & Springfield Railroad, continuing his other business, but resigned his office the next year. He was engaged in many prominent enterprises, where he showed remarkable executive and business ability. In 1848 he formed a partnership with Mr. Stillman Witt and Mr. Frederick Harbach to construct the railroad from Cleveland to Columbus, and on its completion became its superintendent, having in 1850 removed to Cleveland. The same year he became one of the contractors to build the Cleveland, Painesville & Ashtabula Railway, and in 1852 became director in both railroads, which offices he held many years. In 1857 he became president of the C. P. & A. R. R. Co. which office he held twelve years. For several years he was also president of the Chicago & Milwaukee R. R. Co., and was for some time a director of the New York Central R. R. Co., as well as managing director of the Lake Shore & Michigan Southern. He held many other offices as railroad president, director, etc. He had a remarkable combination of engineering, building and business ability. He was twice in succession the chairman of the building committee of the First Presbyterian Church in Cleveland, and with his great wealth and earnest purpose and energy a very important auxiliary in any work it undertook. In later years he was interested in many public charities, to which he liberally contributed, and erected several buildings for the orphans of Cleveland—one for the Old Ladies' Home. His last public enterprise of the sort was Adelbert College, at Cleveland, to which he promised \$500,000. He himself superintended the plans for buildings, and expended more money than he expected, so that on his decease his devisees donated \$100,000 in addition. No gentleman of Cleveland filled a larger space in the enterprises of Cleveland, and no one was so sure to carry out his projects

with success. He died May 11, 1883, leaving a very large estate. He left a wife and two daughters—the oldest Clara, the wife of John Hay, the well known *littérateur* and states man; the younger, Flora, married Samuel Mather. He had one son, who was drowned while a student at Yale. His name was Adelbert, and the college so liberally endowed by Mr. Stone was named in his honor. Though an ambitious and energetic man, Mr. Stone preferred that his son's name should be perpetuated rather than his own. It was understood that the loss of this son was a grievous one.

C. C. B.

Samuel Williamson was born in Crawford County, Penn., March 16, 1808. He was of Scotch descent and son of Samuel and Isabella (McQueen) Williamson. His father came over the mountains from Cumberland County in 1800. May 10, 1800, he removed with his brother to Cleveland, where he was a leading citizen and associate judge of the Court of Common Pleas. His son graduated at Washington College, Penn., in 1829. He read law in Cleveland, was admitted in 1835, the same year went into partnership with Leonard Case, and in 1836 was elected county auditor. He held that office eight years when he again practiced law until 1872, when he retired. He had been many years an officer and counsel of the Society for Savings, a very large institution, and having some \$10,000,000 deposits, was elected its president, in which office he continued until his death, January 14, 1884. He held many other offices of political, public and business trusts. He was in all these places possessed of great influence, whether as railroad director, in the City Council, Board of Education or Legislature. While in the State Senate he was a very leading member. He was for twenty-three years president of the First Presbyterian Society. He was a man of quiet, grave and studious habits, learned in law, remarkably sound in judgment not only in law but in business and active life, interested at all times in the public welfare, and wise in all his methods and views. He

was for quite a number of years treasurer of our Society, and very intelligently and efficiently useful in other ways. He was universally respected and as universally beloved, and perhaps as widely known and influential in Cuyahoga County as any gentleman living. Mr. Williamson left a widow, *née* Mary Tisdale; three sons—Judge S. E. Williamson of Cleveland, George T. Williamson of Chicago, and Rev. James D. Williamson of Norwalk.

C. C. B.

WESTERN RESERVE

NORTHERN OHIO

HISTORICAL SOCIETY.

Tract 66—July, 1886—Selection 3.

2nd Ed.

Col. Bradstreet's Misfortunes on Lake Erie in 1764.

In my early history of Cleveland, published in 1867, may be found an interesting paper by the late Prof. J. P. Kirtland upon the wreckage of Col. Bradstreet's boats at McMahon's creek, in this county. Prof. Kirtland had examined the relics of the expedition, some of which are in the collection of the Western Reserve Historical Society at Cleveland.

The records of military operations on Lake Erie at that time are not complete enough to be satisfactory. Since 1867 efforts have been made in every direction that had promise of success to collect more evidence. The results are given in tracts 13 and 14 of this Society for 1875.

When the historian John Lathrop Motley was the United States Minister at London, he brought about a thorough search—under the good offices of the British Premier—of the public records, hoping to find the official report of Colonel Bradstreet. It was not found, but some valuable letters were discovered, of which copies were furnished to us. Afterwards the search was renewed by James W. Ward, Esq., of Buffalo, N. Y., in the British Museum, where he made valuable historical notes.

In 1872 General Robert S. Schenck, of Ohio, who was then minister at the Court of St. James, made another effort to clear up the obscurities relating to 1764. The English Premier and officials courteously gave access to the records, and some additional information was gained. The late Dr. Franklin B. Hough, of Lowville, New York, a life member of the Western Reserve Historical Society and an indefatigable student of local history, went carefully over the published and unpublished documents at Albany, N. Y., and furnished the Society what was found there bearing upon the expedition of Colonel Bradstreet, whose private papers are in the hands of his descendants but carefully kept from the public. The Rev. H. A. Homes, Librarian of the State Library at Albany, examined the voluminous correspondence preserved there relating to colonial events, and the newspapers of that period. Whatever was brought to light by these researches was published in tracts 13 and 14 in 1872. My present purpose is to give a general abstract of the papers relating to Bradstreet's expedition and its misfortunes, as far as we have them.

Sir Wm. Johnson was then General Superintendent of Indian Affairs for the British Colonies. He came with Bradstreet from Oswego to Niagara in July, to hold a general council with the western tribes, and if possible to avoid an Indian war. Several thousand red men of the lake country as far as Green Bay were there; also representatives of five of the Six Nations in New York.

The Delawares of Ohio, encouraged by the Shawnees, the great mischief-makers among the western tribes, were in consultation with the Senecas of western New York, hoping to prevent their attendance at the council. Colonel Bradstreet's command of 1195 regular and provincial troops, with about 800 friendly Indians, were a decided check to the warlike designs of the Senecas. The Delawares and Shawnees concluded to resort to diplomacy. After much palaver Sir William concluded to advise the advance of Bradstreet to Detroit, under the instructions of General Gage.

Colonel Bouquet was then at Pittsburg, with about the same force, also under orders to invade the Ohio country in case negotiations failed. Colonel Bradstreet crossed the Niagara portage from Lewiston to Fort Schloss on the 7th of August. His boats, which were 43 feet length of keel, carrying 27 men and their supplies, reached Fort Erie, opposite Buffalo, on the 8th, and advanced seven miles along the north shore. On the 9th the command, with its Indian allies, crossed to the south shore, reaching the *Ance aux Feuilles*, or the bay at Erie, Pa., where he was met by deputations of the Shawnees and Delawares of the Muskingum. Not being well posted in Indian intrigues he made a treaty with them, on the strength of their promise to deliver all their white prisoners at Sandusky Bay. He then proceeded to Detroit, from whence a battalion of the 45th regiment was dispatched by vessel to form a garrison at Mackinaw. Pontiac's uprising in 1763 had annihilated the garrison at old Fort Mackinaw, and destroyed the fort. There were in 1764 four British schooners on the upper lakes—the *Gladwin*, *Boston*, *Victory*, and another, which made the transportation of supplies equal to the wants of the military service.

How many troops were left at Detroit, or how many there were in the command at Sandusky Bay, whether regular, provincial or Indian, does not appear in the documents within my reach. Colonel Brad-

street formed a camp on the north shore of the bay, near where the portage reaches it from the mouth of Portage river at Ottawa. This was in the month of September, and here he awaited the result of the negotiations at the bay of Erie.

Colonel Bouquet and General Gage placed the true value upon that solemn document. Colonel Bouquet was ordered to move on the Delaware and Shawnee towns, and Colonel Bradstreet to march to the Scioto plains. He had dispatched Captain Morris up the Maumee to the forks, now Fort Wayne, Indiana, to confer with the *Miamis*. Captain Morris met Pontiac there in a very surly mood. The Captain and his guides were severely treated, but Pontiac, like the Shawnees, was ready to send messengers to Bradstreet. This officer had become educated in Indian promises, and declined to meet any one but Pontiac himself.

At the falls of Sandusky river, now Fremont, Ohio, he discovered that his boats could not ascend the channel any further. His New York Indian allies could have done it in their canoes, but they declined to move against the Delawares. At least a month of inaction passed at the British camp, extending to the middle of October. On the 17th, Col. Bradstreet concluded that it was unsafe to remain longer, and proceeded in his boats along the shore towards Niagara. On the evening of the 19th the little army encamped about two and one-half miles west of Rocky River, on a limited piece of level ground at McMahon's Run. In the night there occurred one of those sudden agitations of the water which are common on these lakes, similar to what happened at Cleveland and along the shore from Sandusky to Erie on the 22d of June, 1832. Twenty-five of the *batteaux* were wrecked, and most of their lading lost. Probably the Indians, according to their invariable usage, had drawn their canoes far enough on shore to save them. As usual, this tidal wave was followed by a storm.

The morning of the 20th showed the extent of the misfortune. How many men were without boats cannot be stated, but the capacity of the twenty-five that were broken up was about 700. The scene, and forebodings of the troops, must have been of the most dismal character. Detroit was the nearest English post. Pittsburg was not furnished with subsistence for such a body of man. It is full 200 miles to Niagara. It appears scarcely credible, but

the records seems to say that the command got on board of the remaining boats, probably including canoes, and on the 22d proceeded to Grand River, in Lake county, a distance of about forty miles. Here they were detained by a continuous gale until the 29th. Col. Bradstreet determined to send a portion of the command along the shore on foot, to be relieved and supplied by the boats coasting abreast of them. It was discovered that even by this mode their provisions would not hold out until Fort Erie could be reached. One hundred and seventy provincials were directed to march along the trails parallel to the shore killing what game they could. The flotilla pushed on for Fort Erie from whence supplies were to be hurried back, for the relief of the party on shore. Although we have the journal of Capt. DeGarmo of Bradstreet's command, there are so many blanks that it gives very little information. There does not appear to have been unusual suffering in the land party. Major Mante states that no lives were lost at Rocky River. On entering the Oswego River a vessel called a "snow," filled with troops, was wrecked, and its lading lost, but no soldiers.

The most distressing part of the expedition occurred on the march from Oswego to Albany in the month of December. Expeditions, where the troops are con-

veyed in open boats on these lakes, are very hazardous. Those used by Major Rogers in 1760, going to the relief of Detroit, were larger than those of Major Wilkins in 1763, or of Col. Bradstreet in 1764. Such craft are of necessity deeply laden and badly managed. Of these three expeditions, two became disastrous wrecks, and they were the last experiments in that line of transportation. If vessels could not be had, light Indian canoes, capable of landing anywhere, are the safest of all craft.

CHAS. WHITTLESEY.

AUTHORITIES REFERRED TO ABOVE.

Letters by Sir Wm. Johnson to the Board of Trade, London, 1763, 1764, and 1765.

Newport, Rhode Island, Mercury, December 26, 1873—Major Wilkins' disaster, November 7, 1763.

Letter of Lieutenant James Gorell, same date, Maryland Historical Society.

Work of Major Mante, published in 1795.

Letter from Niagara, July 30, 1764, Newport Mercury, in Congressional Library.

Mercury, November 8, 1764; also November 19, and December 30, news from Sandusky; also August 27, letter from Fort Schuyler, September 3.

Letter from office at Sandusky, October 5, 1765—tracts 13 and 14. Also from Lt. Col. Israel Putnam, Sandusky, October 7. Letter of Col. Bradstreet to Col. Bouquet, Sandusky, October 17, and Bouquet's reply, November 16. Same to Gov. Fauquier, of Virginia, November 15.

Gen. Gage to Lord Halifax, New York, December 13, 1764. Petition to New York Assembly, November 27, 1765.

NINETEENTH ANNUAL MEETING

OF THE

Western Reserve

AND

Northern Ohio Historical Society,

AT

CLEVELAND, OHIO,

MAY, 1886.

Tract No. 67.

CLEVELAND, OHIO;
LEADER PRINTING COMPANY, 146 SUPERIOR STREET.
1886.

OFFICERS OF THE SOCIETY.

1886--87.

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COL. CHARLES WHITTLESEY.

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(Holding over to May, 1887.)

C. C. BALDWIN, RUTHERFORD B. HAYES,
STILES H. CURTISS.

To May, 1888.

JOHN W. ALLEN, DOUGLAS PERKINS,
CHARLES WHITTLESEY.

To May, 1889.

LEVI F. BAUDER, PETER HITCHCOCK, HENRY N. JOHNSON.

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Genealogies—

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Ohio Local History and Atlases—

L. F. BAUDER, S. H. CURTISS, W. H. BREW.

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Military History—

GENERAL R. B. HAYES. GENERAL M. D. LEGGETT, COL. H. N. WHIT-
BECK, C. C. DEWSTOE, D. H. KIMBERLY.

ANNUAL MEETING.

The Nineteenth Annual Meeting of the Society was held at its rooms on the evening of May 25th, 1886. In the absence of President Whittlesey, Hon. John W. Allen presided. The annual report of the Secretary, C. C. Baldwin, was read, approved, and ordered printed. It is hereto appended. The report of the Treasurer was also submitted and approved.

The following elections were made:

President—

COL. CHARLES WHITTLESEY.

Vice Presidents—

D. W. CROSS, J. H. SARGENT, W. P. FOGG, SAM BRIGGS.

Elective Curators—

For term expiring May, 1887—Holding over from election in May, 1884.

C. C. BALDWIN, RUTHERFORD B. HAYES, STILES H. CURTISS.

For term expiring May, 1888.

JOHN W. ALLEN, DOUGLAS PERKINS, CHARLES WHITTLESEY.

For term expiring May, 1889.

LEVI F. BAUDER, PETER HITCHCOCK, HENRY N. JOHNSON.

Corresponding Secretary.

C. C. BALDWIN.

Recording Secretary.

D. W. MANCHESTER.

Treasurer—

JOHN B. FRENCH.

Librarian—

D. W. MANCHESTER.

D. W. MANCHESTER, *Recording Secretary.*

THE SECRETARY'S REPORT.

NINETEENTH ANNUAL MEETING

OF THE

SOCIETY.

ANNUAL REPORT—1886.

The last year has been one of quiet growth.

Both the President and the Corresponding Secretary have been unable to give the usual attention to the matters of the Society.

President Whittlesey has been steadily confined to his house, and Secretary Baldwin has been steadily engaged in other matters, and for a considerable part of the time called by his duties to other parts of the State.

The general increase in public interest in historical matters has been marked.

The Library has been more read for purposes of historical research and writing, and the Museum has received constant attention from many visitors.

VISITORS.

The number of visitors from May 1st, 1885, to May 1st, 1886, was about 6,000, and the number the previous year was about the same.

The rooms are open from one to four every afternoon. There are frequent requests to have them opened more hours, and it would no doubt be to the convenience of the public to do so, and it would be well to comply with the requests if the public, or a portion of it, will contribute the necessary expense.

Visitors often attempt to enter the rooms when they are not open, and their number would be considerably increased were we able to keep open in the forenoon as well.

A few weeks since the Board voted to charge an admission fee of ten cents except to members and their families. The result has been quite satisfactory, which, with the very limited income of the Society, promises substantial help to its funds without apparently much diminishing the number of desirable visitors.

MUSEUM.

The Museum naturally attracts the most attention from the general public.

The number of the donors to the Museum for the last two years (since the last printed report) is seventy-seven.

The number of articles has been 3,332, including the bequest of Henry L. Goodman.

The most notable donations have been that bequest—of the collections of coins made by the late Alfred T. Goodman (formerly an officer of this Society) and that made by Mr. H. L. Goodman himself.

The collection was received from John G. White, Esq., the executor of Mr. Goodman, and numbers two thousand, eight hundred and twenty-five coins and medals and an obelisk case which contains a considerable share of the collection. It will be entitled the “Goodman Collection,” in memory of its donor.

The “Sons of St. George” have contributed a carved oak frame for the wreath presented by Queen Victoria at the funeral of President Garfield. The oak is from a part of an old bridge built and opened to commemorate the battle of Waterloo, and was said to have been three hundred years old at the time it was used in the construction of the bridge. It is very handsomely carved by Miss A. M. Strong.

The donation of the original portrait of Hon. Joshua R. Giddings, painted by the late Alonzo M. Pease, was mentioned in the last report. The names of the donors are :

J. H. Wade.
John D. Rockefeller.
Selah Chamberlain.

W. H. Harris.
S. L. Mather.
John Hay.

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The total was \$479.

H. N. Johnson, Esq., curator of the Society, who has been stationed at Kelley's Island, has contributed many interesting articles from that very interesting locality.

Mrs. Sarah K. Bolton is deserving of especial mention.

Mr. Charles E. Wheeler, our late lamented librarian, planned an extensive series of photograph and other portraits of pioneers and noted citizens. After his health was such that he could not act as librarian, he still made extensive collections, and his heartfelt interest in the matter and his valuable contributions ceased only with his life.

THE LIBRARY.

The additions to the Library have been :

Pamphlets,	-	-	-	-	-	-	-	-	-	857
Bound Books,	-	-	-	-	-	-	-	-	-	356
Papers,	-	-	-	-	-	-	-	-	-	250

The donations to the Library were made by one hundred and fifty-seven donors, whose names will be found in a list following.

The donations most worthy of note are those of Col. Whittlesey, our President, who has donated his library. His collections have been made during many years while his attention has been especially given to "Ohio," and many are scarce and of great value to the Society.

Other considerable donors are: Hon. R. M. Stimson, of Marietta (whose donations are of unique value, and made with a remarkable knowledge of what is of most value to us.) D. W. Manchester, Samuel A. Green, M.D., of Boston, and Péter G. Thomson, Esq., of Cincinnati, and S. N. Sanford, Esq., of Cleveland.

Mr. Samuel L. M. Barlow has presented his privately printed and very scarce and valuable book, "Notes on Columbus," a unique and expensive volume, finely illustrated (with photographs.)

MEMBERSHIP.

Owing to the inability of officers Whittlesey and Baldwin to look after memberships, the number of annual members during the last two years has not largely increased, save as Mr. Manchester, acting as librarian since January, 1886, has found time to devote to it, he having secured some fifteen new members. The matter only needs active attention to see a large increase. This is very desirable for every reason. The names of members of all kinds follow this report.

PUBLICATIONS.

The publications of the last two years have been:

Tract 61, July, 1884. Surveys of the Public Lands in Ohio, by President Whittlesey.

Tract 62, Nov., 1884. The Corporate Birth and Growth of the City of Cleveland—An Address to the Early Settlers' Association, Cleveland, by Hon. S. O. Griswold.

Tract 63, Nov., 1884. The Geographical History of Ohio—An Address to the Pioneers of Mahoning Valley, at Youngstown, by C. C. Baldwin.

Tract 64. Map and Description of Northeastern Ohio, by Rev. John Heckewelder, 1796.

Tract 65. Annual Meeting of 1884.

There should have been more.

Since the first of May 1886, but before the printing of this report, Tract 66 was printed, containing the last and final contributions of Col. Whittlesey to the literature of Gen. Bradstreet's unfortunate expedition in 1764.

LECTURES.

During the last year a series of meetings was held in the rooms of the Board of Education, which proved to be of much interest. The exercises were quite varied, as will be seen by the special report of these meetings made by Secretary Manchester, and following hereto, and it is fully demonstrated that they may be maintained.

Especial thanks are due to Prof. J. P. McLean, whose very able lecture, finely illustrated with a calcium light, was not only without expense, but money in pocket to the Society.

In this connection thanks should be expressed to Judge Stevenson Burke, Vice President of the C. C. C. & I. R'y. Thanks are also due to Rev. H. M. Ladd, D. D., for the use of his light.

FINANCE.

The receipts from all sources during the

Last two years have been	-	-	-	-	-	\$1,805.28
The total expenses have been	-	-	-	-	-	1,279.13

Leaving a balance of	-	-	-	-	-	\$26.15
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paid over to the new Treasurer.

These receipts should show in the future a considerable increase from annual memberships and from admission fees. If generous people knew how much can be done in this Society with a little money, the funds of the Society should also rapidly increase.

The endowment of the Society is at present a fund amounting to about \$10,000, in the hands of Hon. William Bingham, Trustee and survivor of Hon. Jesse P. Bishop and George Willey, formerly co-Trustees.

LIBRARIAN.

During the year 1884, Mr. Charles E. Wheeler, the librarian of the Society, became so feeble that it was evident he should not be asked to continue in his office, and connection with it was severed on that account. His fidelity to the Society

has been great, and it was with much regret that the Board found that they must separate from him, and Mr. Wheeler's sorrow was as great. As long as he lived he seemed to plan and live for the Society, and an extensive line of portraits, of various sorts, attests his affection for it after he ceased his official connection with it.

Mr. Daniel Holmes succeeded him from August, 1884, to January, 1886, when other duties called him from the rooms. His administration was faithful, and he was very systematic in his duties. The Board regretted his departure, and are glad that he is still interested in the Society.

He was succeeded by Mr. D. W. Manchester, the present Recording Secretary. Mr. Manchester has in a high degree unusual ability in his place. He has, as well, a great taste for historical and antiquarian research as well as tact and good sense in business. He took the place temporarily. It is to be hoped that he will find it not too inconvenient to continue.

OBITUARIES.

There follows the certain sad duty of remembering our deceased comrades, and there are appended to this report obituaries of the following life members :

Mr. Alva Bradley.

General John H. Devereux.

Theodatus Garlich, M. D., of Bedford.

Franklin B. Hough, M. D., of Lowville, New York.

Mr. George Mygatt.

Hon. Eben Newton, of Canfield.

Mr. Joseph Perkins.

Mr. George Willey.

Hon. F. D. Parish, an honorary member.

There follows also a notice of Mr. Charles E. Wheeler.

The loss of the Society is very great in the death of Mr. Joseph Perkins. He was one of the founders of the Society, a curator from the beginning, and a constant and able friend who contributed generously at all times with his purse and good sense to the success of our Society.

C. C. BALDWIN,

Corresponding Secretary.

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* Patrons are those whose cash donations have been not less than \$500 each.

† Life memberships are \$100 each.

DECEASED LIFE MEMBERS.

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General L. V. Bierce.	I. A. Lapham, LL.D., Wisconsin.
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REPORT OF LECTURES AND MEETINGS BY RECORDING SECRETARY.

In the latter part of November last notices were mailed to members calling a meeting at the rooms of the Society to consider the matter of holding meetings free to the public in the interest of the Society during the winter following. In response to the call a number of members met and it was decided to take such action, in accordance with which a committee was appointed to carry out the plan adopted by securing a room for the purpose, to engage lecturers, and to make general necessary arrangements. The Board of Education very kindly and freely granted us the use of their "Assembly Room," in the Public Library Building on Euclid Avenue. All the meetings were well attended, and the audiences made up from the educated, intelligent and cultured portion of the community which appreciated the favor and good work done on the part of the Society. The meetings also directed the attention of the public to the Society, from which good results have come. In short, the meetings were a success in every respect, and creditable to all concerned. It was a matter of very general regret that the health of Col. Whittlesey, the President of the Society, was such that he could not meet with us, thus losing the benefit of extensive information and knowledge obtained by years of study and personal investigation of the various topics considered. The dates and exercises are as follows:

February 6th,

DR. D. T. GOULD,

of Berea, read an interesting paper on the tracing by him of a

"Pre-glacial Water-course"

through Rockport, Middleburgh and other towns in Cuyahoga county. Additional interest was given to this meeting by Prof. G. Frederick Wright, of Oberlin College, who illus-

trated by views with magic lantern the discoveries of Dr. Gould. At this meeting a resolution by Judge C. C. Baldwin, Secretary, was presented, providing for the appointment of a committee to petition the State Legislature for its aid in securing the preservation of pre-historic earth-works in different parts of the State.

February 20th,

PROF. J. P. MACLEAN,

of Hamilton, a member of the Ohio State Archæological and Historical Society, delivered a lecture on the

“Mound Builders,”

illustrated by charts, maps and stereopticon views. From his high repute as an Archæologist and author, the Society and public had been led to expect an occasion of much interest and profit, and the expectation was fully met.

March 6th,

PRESIDENT J. H. FAIRCHILD,

of Oberlin College, read a paper on

“The Spalding Manuscript and the Book of Mormon.”

It was a thorough and exhaustive research and elucidation of this interesting and disputed question. This paper has since been placed before the public in the May number of the Magazine of Western History, a publication of this city.

March 20th,

MR. B. A. HINSDALE,

Superintendent of the Cleveland Public Schools, presented a paper on

“Title Deeds to the Western Reserve,”

treating the subject historically from the time of the voyages of the Cabots and the early English charters, to the final Legislation of Connecticut and Congress in the year 1800.

It was of great merit, and a perfect mine of information on this important topic, and an exceedingly valuable contribution to general and local history. General R. B. Hayes, who

is an active member of our Society, and who presided at this meeting, expressed the hope that the paper would be published. This the Society contemplates doing.

April 16th,

the exercises consisted of a

“Conversational”

on the Mound Builders, led and conducted by the Secretary,

HON. C. C. BALDWIN,

whose investigations and opinions in this line of thought are extensive and valuable. This proved to be one of the most enjoyable, instructive and entertaining of our meetings, and was participated in by several members of the Society and public, among the latter of whom was Mrs. O. B. Campbell, of Cleveland, who read an essay considering in the main the Mounds in Ohio. Her effort gave evidence of comprehensive reading and thought, and was alike creditable to herself and the occasion.

April 23d,

MR. A. A. GRAHAM,

of Cleveland, Secretary and Librarian of the Ohio State Archæological and Historical Society, gave us

“The Origin of the School System of the Northwest Territory,”

in which he called attention to the fact that among the great moving forces which made the pilgrims exiles to America in 1620, were the right and privilege to teach and believe in accordance with their consciences, and that their efforts to secure for posterity education were measured by their high estimate of its benefits and advantages, so as early as 1635 Pilgrims and Puritans established the first public school in Boston. The paper was rich in matter bearing on the subject, and was well received.

D. W. MANCHESTER,

Recording Secretary.

BIOGRAPHIES.

GENERAL J. H. DEVEREAUX.

General J. H. Devereaux died in this city, March 17, 1886, aged 53 years and 11 months.

General Devereaux was born at Boston, Mass., April 5, 1832. His ancestors were of the best New England stock, and were among those who purchased the town of Marblehead, Mass., from the Indians in 1634. His father was Captain John Devereaux, of the Merchant Marine. He was educated at the Portsmouth, N. H., Academy, and in 1848, when but 16 years of age, he came to Cleveland to test his powers and to make his way in the world.

His first employment after coming West was in the construction, as an engineer, of the Cleveland, Columbus & Cincinnati Railroad. He was afterwards employed as engineer in the construction of the Cleveland, Painesville & Ashtabula Railroad. In 1852 he took up his residence in Tennessee, and became division and resident engineer of the Tennessee & Alabama Railroad, holding the position for about eight years. During a portion of that time he was also civil engineer of the city of Nashville, and prominently connected with the internal improvements of that State and section.

The Rebellion having broken out in the South, and the State of Tennessee having seceded from the Union, and his heart being with the Union, he decided to close up his business affairs in the South and tender his services to the Government.

He was employed by the Government in the management of the railways in Virginia at that time controlled and used by the Government. He had official charge of all railroads out of Alexandria or connected therewith.

The labor thrown upon him in this capacity can scarcely be appreciated at this day. The railroads in Virginia were at that time in a deplorable condition. To put them in a condition fit for Government use required almost a total reconstruction. He, however, saw what was to be done, and promptly proceeded with his task. New rails, new ties, new bridges, new equipment, new tools, and new machinery, were all required in the work of reconstruction, and all had to be considered, adopted, or rejected by him.

That he performed his work quietly, thoroughly and well, is well known. The services rendered by him to the Government and the country in this capacity were of inestimable value. It is not necessary to recount them here in detail. They are a part of the history of the times in which they were rendered.

In the spring of 1864 he resigned his position as Government Superintendent of the railroads in Virginia and came to Cleveland and accepted the position of General Superintendent of the Cleveland & Pittsburg Railroad. He was soon afterwards made Vice President, and held the office until May, 1868, when he resigned to accept the Vice Presidency of the Lake Shore Railway. He was afterwards promoted from the office of Vice President to that of President of the Lake Shore Road, and continued as such until the consolidation of all the lines between Buffalo and Chicago into the Lake Shore & Michigan Southern. He was then made General Manager of the entire line, with all its leased lines and branches, a position of very great responsibility and labor.

In 1873, at the unanimous request of the stockholders of the Cleveland, Columbus, Cincinnati & Indianapolis Railway Company, he accepted the Presidency of their road, the road which many years before, as an engineer, he had helped to construct. At the same time, and by the same arrangement, he also accepted the Presidency of the Atlantic & Great Western Railroad Company. At the same time he accepted the Presidency of several railroads connected with the two leading systems last mentioned.

It is well known that within a very short time he materially improved the physical condition of both these great lines of railroad, contributing much to make them what they have since been—popular lines of travel.

The obligations of the Atlantic & Great Western proving much larger than the income and resources of the company were able to meet, he was in December, 1874, appointed Receiver of that Company. He performed the duties of Receiver until the Company was reorganized in 1880, when he was elected President of the reorganized Company, then known as the New York, Pennsylvania & Ohio, and he remained President of that Company until November, 1881.

He took an active interest in the construction of the Pittsburg & Lake Erie Railroad, which gave an outlet to Pittsburg by the way of Youngstown. He was, from the organization of that Company until his death, a Director. He was also Director and Vice President of the Pittsburg, McKeesport & Youngioghenny Railroad, and for many years a Director of the Dayton & Union Railroad, and Director and Vice President of the Cleveland & Mahoning Railway Company. He continued as President of the Cleveland, Columbus, Cincinnati & Indianapolis Railroad until his death.

He died in the prime of life, less than 54 years of age, and yet fully forty years of his comparatively short life were spent in active work. He was pre-eminently a man of work, a man of strong, clear, honest convictions and purposes, and a man who fully realized that all things useful are to be achieved only by hard labor, and from his youth up to almost the hour of his death, he worked faithfully, honestly and incessantly.

This is not the place to publish a eulogy on General Devereaux.

It may not be out of place to note a few of his leading characteristics, and, first of all, he was always in earnest. In business, in all the duties he owed to his country, to his church, to his city, to his neighborhood, to his family, he

was always in earnest, true, loyal and patriotic. Endowed with a large brain and with a large heart, he was earnestly engaged in doing his duty, in performing deeds of love and charity to others.

Notwithstanding his busy life and the vast labors he was called upon to perform, he was always a model of kindness and urbanity.

No man, however poor or however humble his circumstances might be, ever came into his presence and asked him for a favor without receiving the kindest treatment and the most considerate answer. He was never too much engaged to be civil, and never under any circumstances, however pressed, however worried, forgot that he was a gentleman.

His devotion to his country, to the city of his adoption, to the business interests committed to his care, to the church of which he was an honored member, are so well known as not to need repetition here.

His benevolence was well known, and yet the public knew but little of the contributions which he made for the benefit of others. There were few charities, if any, connected with the city of Cleveland, that did not receive his friendly aid and heavy material contributions. No worthy charity, public or private, ever appealed to him in vain.

It is doubtful whether any man in the city of Cleveland, in proportion to his means, ever gave more than he did to charity.

He was a full, rounded character. In all that goes to make the patriotic citizen, the valuable member of the community and of the church, in all that goes to make the ideal man, he was complete.

It may be truly said of him that in his death the city, the State, the nation, lost one of its very brightest citizens; the church of which he was a member, one of its brightest ornaments, and that to his family and friends his loss was irreparable.

STEVENSON BURKE.

FRANKLIN B. HOUGH, M. D.

Dr. Hough, of Lowville, N. Y., a corresponding and life member of this Society, died at his home, in 1885, at the age of sixty-three years. In 1847-8 he was a student of the Western Reserve Medical College in Cleveland. He was also a student of mineralogy, geology and natural history, having in 1843 graduated from Union College, Schenectady, N. Y.

For some years after 1848 he practiced medicine at Somerville, N. Y. His tastes were for history and statistics. Prior to 1863 he published fourteen valuable works on these subjects. For several years prior to 1884 he was attached to the United States Bureau of Agriculture in charge of the department of Forestry. Through his personal efforts Congress passed laws to encourage tree planting and the growth of trees on the Western plains. He was an enthusiast on this subject, visiting the agricultural societies and the Legislature of the States, and addressing the people in favor of the cultivation of timber.

The great scheme of his life was a literary one. He proposed a plan for a full abstract of all the statutes of the United States from March 4th, 1789, to March 4th, 1889, with all judicial decisions and the reports of the departments for the first century of the republic under the Constitution. A bill for that purpose was introduced by Mr. Blair, of New Hampshire, in the Senate, March 2d, 1885. This abstract would be an epitome of the entire official documents of the Government in all its departments, in a form which any one could understand, with double indices.

In many cases it is now difficult to find a single copy of official records in print. The British government has been even more thorough than this. It makes an annual appropriation for the arrangement of all papers on file in the public offices, which can be found covering many centuries, and the printing of indices, when they are of historical value.

No one could have been found better fitted than Dr. Hough for such a work. His tenacious memory, indefatigable industry, and fondness for such labor were such that had the bill become a law he would without doubt have had charge of this vast project.

His life was probably shortened by overwork. He was a valuable aid to this Society, ever ready to respond to calls for information.

On the very obscure subject of Col. Bradstreet's expedition to Detroit in 1764, and the unfortunate loss of his boats near Rocky River, Dr. Hough furnished a large part of the details which we have published.

C. W.

CAPT. ALVA BRADLEY.

Capt. Alva Bradley received very little education, and was not much interested in books, but cheerfully became one of our earliest life members. He had a full experience in the rough school of pioneer life, which has laid the foundation of many noble characters. His father became a settler in Brownhelm, Lorain County, O., in 1823, when his son was nine years old.

President Fairchild, of Oberlin, himself a pioneer boy of Brownhelm, has stated that they became acquainted at a mill on the Vermillion River, and afterwards at the school house, four miles from the Bradley homestead, where Alva came every day in winter on foot. The future president of Oberlin brought a bushel of corn to the mill, on a horse, himself seated on the bag of grain. The future millionaire and lake commodore came with half a bushel of wheat which he carried on his back. Fifty years afterwards the rich ship owner presented, without consultation, Oberlin College with funds for a fine building. When about nineteen years of age, young Bradley had the usual desire of that era in life to become a sailor, and leaving the farm went before the mast on a small lake vessel two seasons.

As a stalwart boy he had done his full share in clearing land on the homestead. He had become a good hunter of the game of the valley and bluffs of Vermillion River. This energetic, honest, industrious lad on land, on the water made so good a sailor that he was promoted to be a mate.

In 1839 he became a captain, and in 1841 his life-long friend and partner, the late Ahira Cobb, built a vessel of 104 tons, which was then quite a respectable craft. Their commercial venture was so successful that a larger vessel was built, and from the earnings nearly every year another, all sailing under the personal supervision of Capt. Bradley. The firm did not insure but laid aside a sum equal to the insurance as a building fund.

Every known improvement was introduced to make their vessels safe, capacious and rapid sailers.

In 1859 they owned quite a fleet, which had been built at Vermillion, when they became citizens of Cleveland.

As propellers came into the lake service they disposed of sailing vessels, or used them as barges in tow of their steamers. These were in every respect first-class, both in tonnage and propelling power. They made, with two barges attached, eight miles an hour. When the fleet consisted of eighteen vessels, Mr. Cobb sold his interest to Capt. Bradley and their favorite captains. At the time of his death it embraced twenty-five thoroughly equipped craft. This large business was so judiciously managed that the profits were regular and very satisfactory. His perception was clear, embracing all the details of navigation, and the character of his captains, both of which were necessary to success. Though there was some hesitation in his speech, his ideas were clear, and his mind well balanced. There was an abiding sense of justice, coupled with good nature, in all his dealings with those in his employ, which made them persistent friends. His resentments were few and transient, his intercourse always kind, charitable and social, not impaired by prosperity. He was reflective and reticent, but

his thoughts were broad and unselfish. In business affairs he was exact without being disagreeable. Though he loved money-making it was not in the spirit of the miser. Such characteristics could not fail of success. Though thoughtful and reticent he was not morose. His contributions to benevolent objects were more numerous than even his best friends were aware, and were judiciously placed.

Capt. Bradley was born at Ellington, Conn., on the 27th of November, 1814. Married in 1850 Miss Ellen M. Burgess, of Milan, O., an estimable lady, who survives him. He died November 28th, 1885. For many years he was subject to several painful diseases, the result of over exertion, as a lake navigator and contractor of vessels to which he gave personal attention.

C. W.

JUDGE EBEN NEWTON.

Judge Eben Newton, of Canfield, Mahoning County, O., was a gentleman of remarkable energy, both mental and physical. He was born in Goshen, Conn., October 16th, 1795. At the age of nineteen he came to Ohio, locating near Ravenna, Portage County, where he worked on a farm, and read law with the late Hon. Darius Lyman, and with the Hon. Jonathan Sloane. In 1823 he was admitted to the practice of law at Warren, Trumbull County, O., and at once formed a partnership with the Hon. Elisha Whittlesey, which lasted until the death of the latter, in 1863. In person he was tall and slender, with great personal activity and a commanding presence. As an advocate Mr. Newton excelled before juries, because of his earnest and impassioned manner. He was a connoisseur of animals, especially horses, on whom he made extensive journeys in legal practice throughout the Western Reserve, where he needed those of easy and rapid gait. In this way he outrode his legal brethren. He rose early, and frequently made fifteen miles before breakfast.

The attorneys of the early days wore heavy leggings over their boots and pantaloons which soon became covered with mud.

Judge Newton dealt in beef cattle, which he kept on a suite of farms in Canfield until they were ready for the eastern market. Always cheerful with whoever he met, he became a popular person throughout the Reserve. In 1840 he was elected to the State Senate, and in 1846 appointed Judge of the Court of Common Pleas for the Third Circuit. In 1850 he was elected to Congress, and in 1852 returned to practice. He married Miss S. Church, of Canfield, soon after being admitted to the bar, who shared his fortunes through life and still survives, universally respected in the community. His published discourses are numerous, always instructive, and frequently eloquent.

During the month of his death he made a journey to California and returned, affected by a cold that terminated his life at midnight of November 5th and 6th, 1885, passing away in peace in his ninety-first year. Probably no person of the Reserve was known to more persons.

His funeral took place at the Academy on a dismal day of incessant rain, but the village was crowded with the teams that came from all parts of the country, and with still larger numbers who came by special trains. To them all he was a friend of the type of the days of the pioneers.

C. W.

JOSEPH PERKINS.

Our Society could not lose a better or more valuable friend than the late Joseph Perkins. His father, General Simon Perkins, was born in Lisbon, Conn., in 1771, and was the son of a captain in the Revolution.

In 1797 the proprietors of the Connecticut Land Company, residing in that vicinity, formed with their lands the Erie Land Company, and Mr. Simon Perkins became the man-

ager, spending a considerable part of his time on the Connecticut Western Reserve. It is said that in 1815, as agent and owner, General Perkins paid one-seventh of the entire tax collected in the State of Ohio. He settled in Warren, Trumbull County, O. He was very prominent in the early troubles with the Indians and in the war of 1812, in which he was Brigadier General. He was during his life a very prominent and much beloved citizen. He left a large estate, and sons much honored after him. Two of these sons are still living. A third, Jacob Perkins, was a prominent citizen of Cleveland, and an influential promoter of the Mahoning Railway. Jacob died in 1859.

Joseph, the fourth son, was born in Warren, July 5th, 1819. At the age of twenty he graduated at Marietta College, and from his alma mater afterward received the degrees of Master of Arts and Doctor of Laws. In October, 1841, he married, at Marietta, Miss Martha E. Steele, who died some years since, and his tender nature never overcame the effect of her loss.

Mr. Perkins was one of the executors of his father's estate, and exhibited ability in that trust. After the settlement of the estate he settled in Cleveland, where his life was one of great sagacity and trusted integrity in the management of affairs. His was a very successful business life. His large property acquired by descent was remarkably well managed in various enterprises. "It was a fortunate day for the city," said one of the Cleveland papers, "when he became one of its residents. Banking, railroad and real estate interests, and above all wise philanthropies, profited by his exertions." He was chosen President of the Cleveland & Mahoning Railway after the death of Governor Tod.

In 1863 he was elected President of the Bank of Commerce—succeeded by the Second National Bank and now by the National Bank of Commerce—and the largest in Cleveland with a capital of \$1,500,000. In 1873 he resigned, on account of his health, but again succeeded Mr. Garretson on

condition it should only be until a successor should be found. He again resigned in 1877, but on the resignation of the new president he was again elected, and held the office at the time of his death. It is too much and too little to count other business positions he has held. His wise business counsel and sagacity was much esteemed, and with his means, did much for Cleveland. He was a leading spirit in the development of the iron mines of Michigan which have done so much for Cleveland, and in many other ways helped wisely in the development of the manufacturing or other business interests of the city. But, as already intimated, his large business successes or prominence seem too little to speak of. Enough to make other men eminent, these successes seemed too little to dwell upon of a man whose wider, more generous kindness and wisdom for the public dwarfed any business success. Most every obituary speaks first of him as a good man. Before he came to Cleveland, and for much of his life after, a Sabbath School Superintendent, a leading member of his church, a wise and generous supporter of it; other men are as much, but he was more. He had the rare gift and value of consecrating his business sagacity in an eminent degree to the advancement of religion and the foundation and prosperity of public enterprises for improvement or charity. It was as a philanthropist that he was most eminent, and he was a man beloved by all the public—and he deserved it of them all. As most successful business men work for that success, so he worked with brain and purse for the relief of suffering or help to the needy or ignorant; and a very intelligent brain, so that though his aggregate gifts were very large, his counsel and co-operation otherwise was no less valuable. He was a man most industrious, and his hours were filled with the business of various philanthropic enterprises as if that business was his own. And although born to wealth he had the excellent business habits and tireless industry of a man determined to make a fortune for himself. But his daily life was expended not for himself but for others. He was long a member of the State

Board of Charities. The Cleveland Protestant Orphan Asylum on St. Clair Street, of which he was President, stands as a monument, mainly, to his philanthropy. His suggestions as to the construction and management of jails, prisons, hospitals, infirmaries and homes for poor children have been fully recognized and widely adopted. He made a business of the study. He visited county jails. He knew how to criticise. He was accustomed to say "It is easy to find fault; it is not easy to suggest the remedy." But if he criticised as he did without waste of words the listener might be quite sure he would have more to say. He sought out chief defects, and with an intelligent and devoted purpose addressed himself to the suggestion of remedies. He traveled extensively, visited the prisons of many States, and finally had prepared and published at his own expense a plan of jail building providing for light and air, warmth and water, and every essential by which the jail would be made safe and decent, holding its prisoners so as to avoid the bad influence of one upon another. His plan is regarded in its several qualities as a model for such buildings in our own and other countries. The following year he sought to remedy the worst things of our infirmary by submitting a well considered plan of building. Its general design, says Mr. Byers, has proved the wisdom of the designer, and has done more to relieve the county poor houses from squalor, demoralization and abuse than any other, and more than any other feature to lift them from "travesties upon charity to places of decency and to actual conditions of care and comfort for the poor." "He further contributed the model home building for poor children now being provided for by very many counties in our State." "His humane promptings and Christian spirit were moved with compassion, and so he lived, and thought, and worked, and prayed for those whose misfortunes, or even whose guilt he used to say, 'might have been my own.'"

A long enumeration might be made of his charitable enterprises, but such a list again seems too little in the face of

such a character. His prison work was but a small part of his continual labor. He was a man whose charities were most unostentatious, though from their very character necessarily often public, nor did he count as to his share, and a new enterprise would receive from him abundant means if necessary to set it firmly going. For one example. He was from the first—1868—President of the Woman's Christian Association in Cleveland. The next year a reformatory home was suggested. He paid the rent of a hired house for four years, headed the subscription for a new building with \$10,000, adding \$3,000 more, gave his personal oversight, and a few years after made a large and valuable addition at his own cost. No estimate, it is said, can be made of the generosity of his current gifts. After the death of Mrs. Perkins he added a permanent fund for her memory. Other examples might be added. He was often in the habit of doing things alone when he might have asked and gotten help.

Mr. Perkins was a most unselfish man. He, with his brother Henry, were executors of the estate of Jacob, and managed it for twenty years very successfully and with a very large result. It was understood that he valued this business success even more than his own. He was very useful and powerful in the temperance movements of his day. His industry, great ability and purse might be safely relied upon for any enterprise for religious or moral welfare. Mr. Perkins did not neglect in his labor the interests of education; since 1846 he was a Trustee of Western Reserve College, and since 1864 a member of its Prudential Committee. His gifts were large, but says the Treasurer, more valuable than all else has been his wise counsel. This College was one to which other members of his father's family had liberally contributed for many years, and to such an extent that he himself once told the writer that these many gifts, with interest, would exceed half a million dollars.

Mr. Perkins was one of the founders of our Society, and one of its Trustees from the beginning. He suggested the endowment, and subscribed \$1,000 toward it, and had in mind

at the time of his death further and wider plans for the Society. He suggested the trip of Mr. Goodman to examine the St. Clair papers and paid a large share of the expenses of it. This resulted in their being acquired by the State of Ohio, and being to-day published to the world. His counsels were always wise and his interest great, and his purse open to the purposes of the Society.

Mr. Perkins had been in rather feeble health for several years, and in 1885 went abroad to promote recovery. On his return, still in feeble health, he was by a violent sea thrown so heavily to the deck as to be knocked senseless. He never fully recovered from the shock. He arrived in New York August 15th, 1885, and died in Saratoga the following 26th day of August.

His life was a continual crown of glory, and it is difficult to write this obituary notice without tears.

C. C. B.

HON. GEO. WILLEY.

The late George Willey was an early life member, and was also one of the Trustees of our invested funds. He was born in Boston, Mass., January 2, 1821. He was a son of Newton Willey, a prominent merchant there. Until his father died, when he was fourteen years old, he attended the Boston schools. He spent four years at Jefferson College, Pennsylvania. He then came to Cleveland and entered the law office of his uncle, Judge John W. Willey, studying the next year with Bolton & Kelley. He was admitted to the bar in 1842. The next year he became partner with the late John E. Cary, and the firm of Willey & Cary continued until the death of Mr. Cary. When President Grant first came into office Mr. Willey was made United States District Attorney, and the office was renewed to him on President Grant's re-election. His firm afterwards was Willey, Sherman & Hoyt.

Mr. Willey was in all respects a man of marked individuality. His mind was clear, strong and accurate. His manner, under all circumstances, cool and deliberate. His learning excellent. His law arguments were strong, convincing and

models of eloquence. Even his oral arguments, reported by the stenographer, read as if carefully written.

He was especially engaged in early days in admiralty business, and latter in patents and all commercial business. His practice was largely in the United States Courts and his tastes preferred that tribunal. His business was rather responsible and large in character than extensive, and exactly such as suited him best. His literary taste was great, and he in early days frequently delivered such addresses and lectures as were interesting, valuable and admired.

He was much interested in the public schools. For several years after 1845 he filled the position of acting manager of the public schools, and his annual reports were full of educational wisdom. It is said that to him is Cleveland largely indebted for its admirable school system. He had no children of his own, but his educational and literary interests and tastes were broad, sound and able. He was often connected with the Case Library, sometimes as its President. He was for some years, and at the time of his death, President of the Cleveland Homeopathic College.

His manner of speech and action was always slow. He never seemed in a hurry. The writer, who officed next him for many years, never saw him in haste or otherwise than perfectly easy, possessed, elegant and able. As he grew old this deliberate habit increased until it seemed a disease, and he finally fell out of practice seemingly from an indisposition to exert himself in it. He died December 29th, 1884.

C. C. B.

HON. GEORGE MYGATT.

George Mygatt was born in Danbury, Conn., June 14th, 1797, and died in Cleveland, April 12th, 1885. His parents were Comfort S. and Lucy Knapp Mygatt, and came to Ohio, July, 1807, settling at Canfield, Mahoning County. The father of George Mygatt possessed strength of character, good judgment and intelligence, and was a man of influence and standing in Connecticut, representing his district in the Legislature of that State, and filling various local offices with

ability. He engaged in mercantile pursuits in Canfield, in which he was honest, active and successful, leading a long and useful life, creditable both to the town and to his family. A daughter, Polly, married the late Elisha Whittlesey, so prominent in State and national affairs. George had in a great degree the qualities which had made his father a man of mark, and they early in his life attracted public notice, so that in 1818 he was employed by the Western Reserve Bank of Warren as clerk. Here he remained two years, engaging then in mercantile business, a taste for which he seems to have inherited from his father, and while engaged thus was also collector of taxes for that county in 1821. In 1829 he was elected sheriff of Trumbull County, and re-elected in 1831. In 1834 he removed to Norwalk, Huron County, to accept the position of cashier of the "Bank of Norwalk," which he resigned after two years to accept a like position in the "Bank of Geauga County," at Painesville. In 1846 he came to Cleveland as President of the City Bank of Cleveland, leaving at the end of four years to engage in private banking under the firm name of Mygatt & Brown, and continued this connection for six years. In 1855 to 1857 he represented Cuyahoga County in the State Legislature. From 1857 to 1861 he was cashier of the "Merchants" Bank, being called to this position that the bank might have the benefit of his wisdom and experience in the dark financial days of 1857. At the end of four years—having seen the bank emerge in a sound and creditable condition—he retired from it and from active life. But inactivity was not in harmony with his nature, and in 1865 he became Secretary of the Cleveland & Mahoning Railroad, and remained such for several years. In all that pertained to Cleveland he had a deep interest and warm feeling, especially in all its charitable and benevolent enterprises and institutions, to which he gave generously of his time and money. He was for years Treasurer of the Cleveland Industrial School. So keenly did he feel for others, and so alive were his sympathies for suffering and deserving humanity, that the emotions of his heart seemed to be marked on feature and countenance. He

was a useful and active life member of this Society and took great interest in its aims and objects.

He was for nearly fifty years a member of the First Presbyterian Church, of Cleveland. He married, in 1820, Eliza Freeman, daughter of Robt. Freeman, of Warren. Of his children, only a daughter, the wife of the late Hon. F. T. Backus survives, at whose home on Euclid Avenue he died in that quiet, peace and satisfaction which come of noble and worthy living.

D. W. M.

HON. F. D. PARISH.

Honorary Member.

Francis Drake Parish, son of Elisha and Lois Wilder Parish, an honorary member of this Society, was born in Naples, Ontario County, N. Y., December 20th, 1796, and died at Oberlin, O., March 23d, 1886. He grew to manhood on the farm of his father in South Bristol, N. Y., and in the spring of 1820, when twenty-four years old, came to Columbus, O., entering then the law office of a relative where he remained two years. In May, 1822, he was admitted to the bar and in that month removed to Sandusky City, in which place he at once commenced practice, taking rank as a sound and able lawyer. In 1861 he was appointed Probate Judge by Governor Dennison to fill an unexpired term of Rush R. Sloane, and had not been in active practice since 1852 on account of throat difficulty. From the latter date he resided most of the time on a farm owned by him near Sandusky, up to 1875, when he removed to Oberlin, where he lived at his death, being then nearly ninety years old. Judge Parish took a lively interest in everything pertaining to the early history of Ohio, and it was largely through his efforts that the Fire Lands Pioneer Historical Society of Norwalk was organized, to which he devoted much of his time and gave of his means. He was one of its officers from the first, and a large part of its early records is the work of his own hands. In acknowledging his election to honorary membership in our Society he said: "The objects of your Society meet my hearty approval, and I shall be glad to co-operate

with you in promoting its design.” He was instrumental in establishing a public library in 1827, and was its librarian until 1840. It was chiefly to his efforts that the first temperance society in his county was organized in 1831, of which he was President. He was the second lawyer located in Sandusky City, E. Cooke having come there the year before, in 1821, and there were no other accessions to the bar until 1825-6.

He was a well-known Abolitionist, identified with the “under-ground railway,” and many a slave has been helped on his way to freedom by him. At the time of his death the Judge was possessed of great wealth and left large tracts of valuable land in Erie County. He was held in high regard by all who knew him for public spirit, generous nature and general worth.

D. W. M.

DOCTOR THEODATUS GARLICK.

To those of our old citizens who remember the manly form and cheerful countenance of Dr. Theodatus Garlick, some thirty years ago, his earnest activity in every good work, his energy in the pursuit of knowledge, and the great pleasure he evinced in imparting it to others; his professional skill so devotedly applied in relieving human suffering; his influence and example in founding and sustaining all our charitable, literary and scientific institutions, no eulogy of him can add to their respect for his memory or to the honorable name and fame his long life of good works has established. To others who did not know him personally a brief review of his useful life will be interesting and instructive.

After thorough preparatory studies he graduated at the University of Maryland, in the city of Baltimore, in 1834. Having successfully pursued the practice of medicine in the interior of the State he came to Cleveland in 1851 or '52, and entered into practice with Prof. Horace A. Ackley, making surgery a specialty. He was elected a member of the Board of Censors of the Cleveland Medical College, and Vice President of the Cleveland Academy of Natural Sciences, subsequently changed to the Kirtland Society of Natural

Sciences. He, with Prof. Ackley, performed many difficult operations successfully in that branch of the art known as plastic surgery. While in Maryland his works in bas-relief, particularly those of the five professors of the college, and the statuettes in *basso-relievo* of Andrew Jackson, Henry Clay and Chief Justice Marshall, were greatly admired and pronounced by many equal to the productions of Thorwaldsen. He was devoted to the pleasing art of angling, and with his intimate friend, Hon. Emery D. Potter, added many new and interesting points in angling literature.

In 1853 his ingenious and active mind was turned with zeal and energy to the artificial culture of brook trout and other food fish. A spring on the farm of Prof. Ackley, a few miles from Cleveland, was selected as being well adapted to their experiments. When the preliminary works were completed, the spawning trout procured, his countenance brightened as success was achieved, and with pride and delight he exhibited his pet mother trout, "Old Bess," to the gaze of his admiring friends. In 1857 he published his work, the result of his experiments in artificial fish culture, entitled "A Treatise on the Artificial Propagation of Certain Kinds of Fish, with the Description and Habits of Such Kinds as are Most Suitable for Pisciculture." Dr. Garlick's first experiments were given in a paper read before the Cleveland Academy of Natural Sciences, in 1854.

In 1855 the Rev. Dr. John Bachman, of Charleston, S. C., published his record of what purported to be an experiment in artificial fecundation, claimed to have been made by him when a boy, in 1804. Dr. Garlick successfully controverted his claim in an exhaustive paper published in the last edition of his work, and his position as the first person to actually propagate fish in the United States by artificial methods was sustained by Professor Spencer F. Baird, one of the ablest scientists in America. At the close of a letter addressed to Dr. Garlick, dated Washington, February 20th, 1880, Prof. Baird affirmed Dr. Garlick's claim as the first person to actually propagate fish in the United States by artificial methods, in these words: "I do not

hesitate in all the circumstances, to assign this position to you."

The Kirtland Society for Natural Sciences, in 1880, published Dr. Garlick's second and enlarged edition of his work on "Artificial Propagation of Fish," a perusal of which must secure to him the priority and honor of propagating fish in the United States by artificial methods.

Dr. Garlick has been a close observer of the wonderful scientific discoveries and improvements of his age, and in many ways has been an enlightened contributor to, and able worker in, that progress which has made the age in which he lived so memorable.

What his active mind grasped, the ingenuity of his brain and fingers wrought into usefulness. About 1864 he was attacked by paralysis, due apparently to some injury of the spine, that resulted in meningitis and the crippling of his lower limbs. With this there were inflammation of the muscles of the back and carbuncles, all of which resulted in chronic pains of the most excruciating character, until at last a most vigorous physical body was literally worn out by prolonged suffering. Dr. Garlick had known Cleveland as early as 1819, he then being about 14 years of age, but prematurely strong and active. His brother Abel was then a manufacturer of gravestones in this city. Theodatus had assigned to him the artistic work of cutting the inscriptions, some of which are still in existence. He did this by the "stent," and so rapidly that about two days in the week were left for hunting, fishing and other frontier amusements, such as wrestling, ball and foot races. Having caught a young elk, it was partially tamed and taken to Vermont. The necessities of life on a farm on the hills of Vermont at that time did not allow much for the education of either sons or daughters, but it was decided that this young man should become a doctor.

With a large surplus of fun and frolic, he had an innate fondness for nature and for art. He was inclined to read, reflect and observe. Like his friend of after life, Dr. Kirtland, he naturally took to an examination of animals, plants

and fishes; not as an amateur, but as a naturalist. This habit never forsook him. He studied medicine under private tutors and at the medical school at Baltimore, where he graduated in 1834, with high prospects as a physician and especially as a surgeon, but came very near being led away by his proclivities as an artist. He made several models of his friends and professors in wax, and when Daguerre published his mode of taking likenesses Dr. Garlick got the materials and received sitters for portraits, on silvered brass plates. He drifted to Youngstown, O., where he settled as a physician, a robust, tall, handsome, enthusiastic and hopeful young man. His innate talent as an artist came into play as a modeler in wax of parts of the human body, especially in their diseased forms, colored to nature. His skillful manipulations were most conspicuous in surgery, combined with quick mechanical expedients. These qualifications gave rise to a partnership with the late Dr. Ackley, of Cleveland, in 1853.

During his long and painful confinement he executed a miniature model of the head of Dr. Kirtland, also a full size bust in plaster now in the Historical Rooms. At the age of 73 he took up the study of Greek, and without a teacher, and in about two years, was able to read the New Testament in its original language. Dr. Garlick had the genius to excel in many fields, but like many men of this class was content to make conquests, and, for want of perseverance, to allow others to secure the practical results. If he had not made scientific acquisitions so easily, he would have placed more value upon them. Between himself and Dr. Kirtland there was an unbroken friendship from 1838 so long as the latter lived, which was like the confidence and affection of brothers.

Dr. Garlick's mother was a sister of Ephriam Kirby, of Litchfield, Conn., an officer in the Revolutionary War, and Director of the Connecticut Land Company of 1795.

Theodatus Garlick, M.D., was born March 30th, 1805, in Middlebury, Addison County, Vt., and died at Bedford, Cuyahoga County, O., December 9, A.D., 1884, aged 70 years, 8 months and 9 days.

MEMORIAL

OF

Colonel Charles Whittlesey.



Chas. Whittlesay-

MEMORIAL

OF

Colonel Charles Whittlesey,

LATE PRESIDENT OF THE

Western Reserve Historical Society.

TRACT NO. 68

CLEVELAND, OHIO :
'WILLIAMS' BOOK PUBLISHING HOUSE,
1887.

In Memoriam.

AT a meeting of the members of the WESTERN RESERVE AND NORTHERN OHIO HISTORICAL SOCIETY, at the rooms of the Society, October 23, 1886, the Hon. John W. Allen acted as chairman. The presiding officer made a short address upon the life and character of Colonel Whittlesey, and appointed H. N. Johnson, Hon. William Bingham, Hon. J. D. Cleveland, a committee on resolutions. The committee presented the following memorial and resolutions, which were adopted unanimously :

"The recent death of Colonel Charles Whittlesey calls forth heartfelt expressions of sorrow from our citizens, and all unite in honorable mention of his name, but to this society his loss is an event of no ordinary character. From the organization of the Western Reserve and Northern Ohio Historical Society till the hour of his departure he had been its president, and during all these years its success and permanency had been objects nearest and dearest to his heart, and it was specially gratifying to him, as his life approached its completion, to know that his labor had not been in vain, and that length of days had been given him to see it established on a permanent basis as one of the honored and useful institutions of the land."

"For the duties of his position he was eminently fitted. The scientific training at West Point, the active duties of an Indian campaign, the years spent in the wilds of the north-west in land surveys and in mineralogical and geological investigations, developed and strengthened his natural love for the useful sciences, for historical research, and for archæological investigation, and gave him such an extended and practical knowledge of men and things as is seldom granted to scientific men. His studious habits, retentive memory and facile pen were invaluable aides in making available to the public the treasures of his mind; and his love for the truth—plain and simple—and his hatred to fraud, combined with an energetic honesty of purpose, gave special weight to his published opinions and statements in all matters of history, archæology and science."

"*Resolved*, That the foregoing expression of our high regard for our late president be, by our secretary, entered upon the record of the society; that a copy thereof be sent, with our sincere sympathy, to Mrs. Whittlesey; and that the same be made the subject of communication to other historical societies of the country, with whom the president was for many years a correspondent."

"*Resolved*, That the Hon. Charles C. Baldwin be requested to prepare a biographical sketch of the late president, to be published by the society as one of its historical papers."

D. W. MANCHESTER,
Recording Secretary.

COLONEL CHARLES WHITTLESEY.

COLONEL CHARLES WHITTLESEY, late president of the Western Reserve Historical society, was born in Southington, Connecticut, October 4, 1808. He was the son of Asaph and Vesta (Hart) Whittlesey,* who settled in Ohio in 1815. Asaph Whittlesey was a lad of unusual activity and spirits. His constitution was fine, but he was, just before he was of age, severely injured by the falling of a tree. For some time it was thought his back was broken. The accident so impaired him for farm labor that

*The father of Colonel Whittlesey⁵ Asaph⁵ was son John⁴ Eliphlet³ Eliphlet² John Whittlesey¹ of Saybrooke. John, believed to be the only early settler of the name, came about 1650, m. 1664 Ruth Dudley², b. 1645, William Dudley¹ of Gilford 1639, who m. in 1636 at Oakley in Surrey, Eng., Jane Sutman; Eliphlet², b. 1679, m. 1702 Mary Pratt and settled in Newington, Conn. (part of Wetherfield); Eliphlet³, captain in the French War, b. 1714, m. first Dec. 16, 1736, Dorothy Kellogg, b. 1716 and d. 1772. He was a farmer in Worthington, Conn., with eleven children. Dorothy Kellogg⁴ was dau. Capt. Martin Kellogg³, who was captured by the Indians and conveyed to Canada in 1704 with his father Martin² and others of the family at the famous capture of Deerfield. Martin Kellogg² was one of the twenty-one children of Lieut. Jirebb of Hadley by his first wife Joanna. Martin² m. 1684 Ann³ dau. Samuel² and Elizabeth Hinsdale⁴ Robert¹ and Ann Hinsdale. Martin Kellogg³ married Dorothy Chester, dau. Stephen Chester of Wetherfield, b. 1659, son John Chester by his wife Sarah dau. of Gov. Thomas Welles of Conn. John Chester was b. 1635, son of Leonard and Mary Chester. John Chester of Bloly Co., Leicester, Eng., and his wife Dorothy (Hooker) sister of the famous Rev. Thomas Hooker of Hartford. John⁴ b. 1741, m. 1765 Mary Beale and settled in Salisbury, Conn., in 1792. He was seventeen times member of the Conn. legislature. Asaph Whittlesey⁵ b. 1781, m. first 1807, Vesta Hart of Southington, Conn., who d. 1835 in Tallmadge, Ohio. Mr. Whittlesey died there 17th March, 1842. Colonel Whittlesey's mother, Vesta, was b. in Southington, Conn., 1789, dau. of Col. Samuel Hart⁶, Captain Reuben⁵, Deacon Thomas⁴, Thomas³, Stephen², Deacon Stephen Hart¹. Stephen¹, supposed from Braintree, England, came from Massachusetts to Hartford, Conn., with Reverend Hooker's company. He was leader in the settlement of Farmington and representative for fourteen years. He died March, 1683. Stephen², born in England, died 1689. Thomas³, b. 1666, m. Elizabeth dau. John and Mary (Hawkins) Judd, and d. 1728. John Judd was son of Thomas, first settler, and Mary Hawkins was dau. Anthony, first settler. Deacon Thomas⁴ of Southington b. 1695, d. 1754, m. 1721. Anne Stanley dau. Thomas and Anna (Peck) dau. Rev. Jeremiah) Stanley. Reuben⁵, b. 1729, d. 1788, captain in Revolution, m. 1759 Rhoda dau. Moses and Sarah (Kellogg) Peck. Col. Samuel Hart⁶, b. 1761, d. 1838, m. Rossanna, b. 1764, only child of Capt. John and Hannah Clarke of Southington.

it changed his life. He removed from Salisbury, Connecticut, to Southington and became a partner with his brother Chester, as a merchant. He married in 1807 Vesta Hart of that place. In the spring of 1813, he started for Tallmadge, Portage county Ohio, in a four-horse wagon, with his wife and two children, one of whom is the subject of this sketch.

War was then in the west, and his neighbors feared they might be the victims of the scalping knife. But the danger was different. In passing the Narrows, between Pittsburgh and Beaver, the wagon ran off a bank and turned completely over on the wife and children. They were rescued and revived, but the accident permanently impaired the health of Mrs. Whittlesey.

Mr. Whittlesey was in Tallmadge, justice of the peace from soon after his arrival till near the close of his life and postmaster from 1814, when the office was first established, to his death. He was again severely injured, but a strong constitution and unflinching will enabled him to accomplish much. He had a store, buying goods in Pittsburgh and bringing them in wagons to Tallmadge; and in 1818 he commenced the manufacture of iron on the Little Cuyahoga, below Middlebury.

The times were hard, tariff reduced, and in 1828 he returned to his farm prematurely old. He died in 1842. Says General Bierce: "His intellect was naturally of a high order, his religious convictions were strong and never yielded to policy or expediency. He was plain in speech, sometimes abrupt. Those who respected him were more numerous than those who loved him. But for his friends, no one had a stronger attachment. His dislikes were not very well concealed or easily removed. In short, he was a man of strong mind, strong feelings, strong prejudices, strong affections and strong attachments, yet the whole was tempered with a strong sense of justice and strong religious feelings." "He had," says the *Ohio Observer*, "a retentive and accurate memory." Colonel Whittlesey's mother received the best advantages which a New England town afforded, and became herself a teacher. She was very happy in correspondence, and fond of writing letters, and she left quite a voluminous diary, which is an excellent example of felicity in composition. His father was brother to Hon. Elisha Whittlesey, a lawyer of Can-

field, Ohio, who settled there in 1806. Having some knowledge of military tactics, in 1808 he was ensign of a company and soon after captain. He served in the War of 1812, rose to the rank of brigade major and inspector. He was eight times elected to congress, and long First Comptroller in the United States treasury. Elisha Whittlesey had much taste and great knowledge of western-history.

Tallmadge was settled in 1808 as a religious colony of New England Congregationalists, by a colony led by Rev. David Bacon, a missionary to the Indians. This affected the society in which the boy lived, and exercised much influence on the morality of the town and the future of its children, one of whom was the Rev. Leonard Bacon. Rev. Timlow's 'History of Southington' says, "Mr. Whittlesey moved to Tallmadge, having become interested in settling a portion of Portage county with Christian families." And that he was a man "of surpassing excellence of character."

If it should seem that I have dwelt upon the parents of Colonel Whittlesey, it is because his own character and career were strongly affected by their characters and history. Charles, the son, combined the traits of the two. He commenced school at four years old in Southington; the next year he attended the log school house at Tallmadge until 1819, when the frame academy was finished and he attended it in winter, working on the farm in summer until he was nineteen.

The boy, too, saw early life on foot, horseback and with ox-teams. He found the Indians still on the Reserve, and in person witnessed the change from savage life and new settlements, to a state of three millions of people, and a large city around him. One of Colonel Whittlesey's happiest speeches is a sketch of log cabin times in Tallmadge, delivered at the semi-centennial there in 1857.

In 1827 the youngster became a cadet at West Point. Here he displayed industry, and, in some unusual incidents there, coolness and courage. He graduated in 1831, and became brevet second lieutenant in the Fifth United States infantry, and in November started to join his regiment at Mackinaw. He did duty through the winter with the garrison at Fort Gratiot.

In the spring he was assigned at Green Bay to the company of Captain Martin Scott, so famous as a shot. At the close of the Black Hawk war he resigned from the army, though recognizing the claim of the country to the services of the graduates of West Point, he tendered his services to the government during the Seminole and Mexican wars. By a varied experience life thereafter was given to wide and general uses. He at first opened a law office in Cleveland, Ohio, and was fully occupied in his profession, and as part owner and co-editor of the *Whig and Herald* until the year 1837. He was that year appointed assistant geologist of the state of Ohio. Through very uneconomical economy, the survey was discontinued at the end of two years, when the work was partly done and no final reports had been made. Of course most of the work and its results were lost. Great and permanent good, indeed, resulted to the material wealth of the state, in disclosing the rich coal and iron deposits of Eastern Ohio, thus laying the foundation for the vast manufacturing industries which have made that portion of the state populous and prosperous. The other gentlemen associated with him were Professor William Mather as principal; Dr. Kirtland was entrusted with natural history. Others were Dr. S. P. Hildreth, Dr. Caleb Briggs, Jr., Professor John Locke and Dr. J. W. Foster. It was an able corps, and the final results would have been very valuable and accurate. In 1884, Colonel Whittlesey was sole survivor and said, in the Magazine of Western History: "Fifty years since, geology had barely obtained a standing among the sciences even in Europe. In Ohio it was scarcely recognized. The state at that time was more of a wilderness than a cultivated country, and the survey was in progress little more than two years. It was unexpectedly brought to a close without a final report. No provision was made for the preservation of papers, field notes and maps." Professor Newberry, in a brief resumé of the work of the first survey (report of 1869), says the benefits derived "conclusively demonstrate that the geological survey was a producer and not a consumer, that it added far more than it took from the public treasury, and deserved special encouragement and support as a wealth producing agency in our darkest financial hour."

The publication of the first board "did much," says Professor Newberry, "to arrest useless expenditure of money in the search for coal outside of the coal fields, and in other mining enterprises equally fallacious, by which, through ignorance of the teachings of geology, parties were constantly led to squander their means." "It is scarcely less important to let our people know what we have not, than what we have, among our mineral resources."

The topographical and mathematical parts of the survey were committed to Colonel Whittlesey. He made partial reports, to be found in the 'State Documents' of 1838 and 1839, but his knowledge acquired in the survey was of vastly greater service in many subsequent writings, and, as a foundation for learning, made useful in many business enterprises of Ohio. He had, during this survey, examined and surveyed many ancient works in the state, and, at its close, Mr. Joseph Sullivan—a wealthy gentleman interested in archæology, residing in Columbus—proposed that, he bearing the actual expense, Whittlesey should continue the survey of the works of the Mound Builders, with a view to joint publication. During the years 1839 and 1840, and under the arrangement, he made examination of nearly all the remaining works then discovered, but nothing was done toward their publication. Many of his plans and notes were used by Messrs. Squier & Davis, in 1845 and 1846, in their great work, which was the first volume of the 'Smithsonian Contributions,' and in that work these gentlemen said:

"Among the most zealous investigators in the field of American antiquarian research is Charles Whittlesey, esq., of Cleveland, formerly topographical engineer of Ohio. His surveys and observations, carried on for many years over a wide field, have been both numerous and accurate, and are among the most valuable in all respects of any hitherto made. Although Mr. Whittlesey, in conjunction with Joseph Sullivan, esq., of Columbus, originally contemplated a joint work, in which the result of his investigation should be embodied, he has, nevertheless, with a liberality which will be not less appreciated by the public than by the authors, contributed to this memoir about twenty plans of ancient works, which, with the accompanying explanations and general observations, will be found embodied in the following pages.

It is to be hoped the public may be put in possession of the entire results of Mr. Whittlesey's labor, which could not fail of adding greatly to our stock of knowledge on this interesting subject.

It will be seen that Mr. Whittlesey was now fairly started, interested and intelligent, in the several fields which he was to make his own. And his very numerous writings may be fairly divided into geology, archaeology, history, religion, with an occasional study of topographical geology. A part of Colonel Whittlesey's surveys were published in 1850, as one of the Smithsonian contributions; portions of the plans and minutes were unfortunately lost. Fortunately the finest and largest works surveyed by him were published. Among those in the work of Squier & Davis, were the wonderful extensive works at Newark, and those at Marietta. No one again could see those works extending over areas of twelve and fifteen square miles, as he did. Farmers cannot raise crops without plows; and the geography of the works at Newark must still be learned from the work of Colonel Whittlesey.

He made an agricultural survey of Hamilton county in 1844. That year the copper mines of Michigan began to excite enthusiasm. The next year a company was organized in Detroit, of which Colonel Whittlesey was the geologist. In August they launched their boat above the rapids of the Sault St. Marie and coasted along the shore to where is now Marquette. Iron ore was beneath notice, and in truth, was not then transportable, and they pulled away for Copper Harbor, and then to the region between Portage lake and Ontonagon, where the Algonquin and Douglas Houghton mines were opened. The party narrowly escaped drowning the night they landed. Dr. Houghton was drowned the same night not far from them. A very interesting and life-like account of their adventures was published by Colonel Whittlesey in the National Magazine of New York City, entitled, "Two Months in the Copper Regions." From 1847 to 1851 inclusive, he was employed by the United States in the survey of the country around Lake Superior and the upper Mississippi, in reference to mines and minerals. After that he spent much time in exploring and surveying the mineral district

of the Lake Superior basin. The wild life of the woods threading the streams, with a guide and voyageurs, had great attractions for him, and he spent in all fifteen seasons upon Lake Superior and the Mississippi, becoming thoroughly familiar with the topography and geological character of that part of the country.

His detailed examination extended along the copper range from the extreme east of Point Keweenaw to Ontonagon, through the Porcupine mountain to the Montreal river, and thence to Long lake in Wisconsin, a distance of two hundred miles. In 1849, 1850 and 1858 he explored the valley of the Menomonee river from its mouth to the Brulé. He was the first geologist to explore the South range. The 'Wisconsin Geological Survey' (Vol. 3, pp. 490 and 679) says this range was first observed by him, and that he many years ago drew attention to its promise of merchantable ores which are now extensively developed from the Wauceda to the Commonwealth mines, and for several miles beyond. He examined the north shore from Fond du Lac east, one hundred miles, the copper range of Minnesota and on the St. Louis to the bounds of our country. His report was published by the state in 1865, and was stated by Professor Winchill to be the most valuable made.

All his geological work was thorough, and the development of the mineral resources which he examined, and upon which he reported, gave the best proofs of his scientific ability and judgment.

With the important results from his labors in mind, the state of Wisconsin secured his services upon the geological survey of that state, carried on in 1858, 1859 and 1860, and terminated only by the war. The Wisconsin survey was resumed by other parties, and the third volume of the 'Report for Northern Wisconsin,' page 58, says :

"The only geological examination of this region, however, previous to those on which the report is based, and deserving the name, were those of Colonel Charles Whittlesey of Cleveland, Ohio. This gentleman was connected with Dr. D. D. Owen's United States geological survey of Wisconsin, Iowa and Minnesota, and in this connection examined the Bad River country, in 1848. The results are given in Dr. Owen's final re-

port, published in Washington, in 1852. In 1860 (August to October) Colonel Whittlesey engaged in another geological exploration in Ashland, Bayfield and Douglass counties, as part of the geological survey of Wisconsin, then organized under James Hall. His report, presented to Professor Hall in the ensuing year, was never published, on account of the stoppage of the survey. A suite of specimens, collected by Colonel Whittlesey during these explorations, is at present preserved in the cabinet of the State University at Madison, and it bears testimony to the laborious manner in which that gentleman prosecuted the work. Although the report was never published, he has issued a number of pamphlet publications, giving the main results obtained by him. A list of them, with full extracts from some of them, will be found in an appendix to the report. In the same appendix I have reproduced a geological map of this region prepared by Colonel Whittlesey in 1860."

Such was Colonel Whittlesey's employment when the first signs of the civil war appeared. He abandoned it at once. He became a member of one of the military companies that tendered its services to President-elect Lincoln, when he was first threatened, in February, 1861. He became quickly convinced that war was inevitable, and urged the state authorities that Ohio be put at once in preparation for it; and it was partly through his influence that Ohio was so very ready for the fray, in which, at first, the general government relied on the states. Two days after the proclamation of April 15, 1861, he joined the governor's staff as assistant quartermaster-general. He served in the field in West Virginia with the three months' men, as state military engineer; with the Ohio troops under General McClellan, Cox and Hill. At Seary Run, on the Kanawha, July 17, 1861, he distinguished himself by intrepidity and coolness during a severe engagement, in which his horse was shot under him. At the expiration of the three months' service, he was appointed colonel of the Twentieth regiment Ohio volunteers, and detailed by General Mitchell as chief engineer of the department of Ohio, where he planned and constructed the defenses of Cincinnati.

In December, 1861, he was ordered to Kentucky with four companies of infantry, to suppress the rebel element in several counties, with headquarters at Warsaw. In the Magazine of

Western History for April, 1885, he gives an interesting account of his experiences there. On the day before Christmas, 1861, loyal citizens from Kentucky represented that several counties in that state were in a condition of anarchy. Kentucky had not then seceded, and Colonel Whittlesey was sent to protect Union citizens, prevent rebel enlistments, secure all rebel arms, and preserve order. The transports reached Warsaw at nine P. M., and within two hours a number of the most active men sustaining the rebellion were arrested and on their way to Camp Chase. The practice of releasing on taking the oath of allegiance had become a standing joke. Colonel Whittlesey substituted agreements by which they severally agreed, that, in case they threatened or injured the persons or property of Union men, or committed any act in aid of the present rebellion and the southern Confederacy, they were to be held summarily responsible in person and property. Sometimes security was required. These agreements were generally kept. His administration there was very successful, and a Kentucky Union legislator said "his course had effected much good for the Union cause," and that "his promptness and decision met with universal praise."

Colonel Whittlesey was in command of his regiment at the taking of Fort Donelson, and was sent north with the prisoners, of whom over ten thousand five hundred were committed to him. The move on Donelson was made in February, 1862. In 1867 was published a letter from Colonel Whittlesey to General Halleck, dated November 20, 1861, as follows:

"Sir, will you allow me to suggest the consideration of a great movement, by land and water, up the Cumberland and Tennessee rivers.

"*First*, Would it not allow of water transportation half way to Nashville?

"*Second*, Would it not necessitate the evacuation of Columbus, by threatening their railway communications?

"*Third*, Would it not necessitate the retreat of General Buckner, by threatening his railway lines?

"*Fourth*, Is it not the most feasible route into Tennessee?"

This plan was adopted and Colonel Whittlesey's regiment took part in its execution.

In April, 1862, on the second day of the battle of Shiloh, Colonel Whittlesey commanded the Third brigade of General Wallace's division—the Twentieth, Fifty-sixth and Seventy-eighth Ohio regiments. "It was against the line of that brigade that General Beauregard attempted to throw the whole weight of his force for a last desperate charge ; but he was driven back by the terrible fire that his men were unable to face." As to his conduct, Senator Sherman said in the United States senate.* "The official report of General Wallace leaves little to be said. The division commander says: 'The firing was grand and terrible. Before us was the Crescent regiment of New Orleans ; shelling us on our right was the Washington artillery of Manassas renown, whose last charge was made in front of Colonel Whittlesey's command.'"

General Force, then lieutenant-colonel under Colonel Whittlesey, fully describes the battle,† and quotes General Wallace. "The nation is indebted to our brigade for the important services rendered, with the small loss it sustained and the manner in which Colonel Whittlesey handled it."

Colonel Whittlesey was fortunate in escaping with his life, for General Force says, it was ascertained that the rebels had been deliberately firing at him, sometimes waiting to get a line shot.

Colonel Whittlesey had for some time been in bad health, and contemplating resignation, but deferring it for a decisive battle. Regarding this battle as virtually closing the campaign in the the southwest, and believing the Rebellion to be near its end, he send it in.

General Grant endorsed his application, "We cannot afford to lose so good an officer."

"Few officers," it is said, "retired from the army with a cleaner or more satisfactory record, or with greater regret on the part of their associates."

The Twentieth was an early volunteer regiment. The men were citizens of intelligence and character. They reached high discipline without severity, and without that ill-feeling that often

* Speech of May, 9, 1862.

† *Cincinnati Commercial*, April 9, 1862.

existed between men and their officers. There was no emergency in which they could not be relied upon. "Between them and their commander existed a strong mutual regard which, on their part, was happily expressed by a letter signed by all the non-commissioned officers."

"CAMP SHILOH, NEAR PITTSBURGH LANDING, }
"TENNESSEE, April 21, 1862. }

"COL. CHAS. WHITTLESEY :

"*Sir*—We deeply regret that you have resigned the command of the Twentieth Ohio. The considerate care evinced for the soldiers in camp, and above all, the courage, coolness and prudence displayed on the battle-field, have inspired officers and men with the highest esteem for, and most unbounded confidence in our commander.

"From what we have seen at Fort Donelson, and at the bloody field near Pittsburgh, on Monday, the seventh, all felt ready to follow you unfalteringly into any contest and into any post of danger.

"While giving expression to our unfeigned sorrow at your departure from us, and assurance of our high regard and esteem for you, and unwavering confidence as our leader, we would follow you with the earnest hope that your future days may be spent in uninterrupted peace and quiet, enjoying the happy reflections and richly earned rewards of well-spent service in the cause of our blessed country in its dark hour of need."

Said Mr. W. H. Searles, who served under him, at the memorial meeting of the Engineers' Club of Cleveland: "In the war he was genial and charitable, but had that conscientious devotion to duty characteristic of a West Point soldier."

Since Colonel Whittlesey's decease, the following letter was received :

"CINCINNATI, November 10, 1886.

"DEAR MRS. WHITTLESEY :—Your noble husband has got release from the pains and ills that made life a burden. His active life was a lesson to us how to live. His latter years showed us how to endure. To all of us in the Twentieth Ohio regiment he seemed a father. I do not know of any other colonel that was so revered by his regiment. Since the war he has constantly surprised me with his incessant literary and scientific activity. Always his character was an example and an incitement.

"Very truly yours,

"M. F. FORCE."

Colonel Whittlesey very soon turned his attention again to explorations in the Lake Superior and upper Mississippi basins, and "new additions to the mineral wealth of the country were the result of his surveys and researches." His geological papers, commencing again in 1863, in the list which follows, show his industry and ability. It happened during his life many times, and will happen again and again, that his labors as an original investigator have borne and will bear fruit long afterwards, and as the world looks at fruition, of much greater value to others than to himself.

He prognosticated as early as 1848, while on Dr. Owen's survey, that the vast prairies of the Northwest would in time be the great wheat region. These views were set forth in a letter requested by Captain Mullen of the Topographical Engineers, who had made a survey for the Northern Pacific railroad, and was read by him in a lecture before the New York Geographical society in the winter of 1863-4.

He examined the prairies between the head of St. Louis river and Rainy Lake, between the Grand Fork of Rainy Lake river and the Mississippi, and between the waters of Cass Lake and those of Red Lake. All were found so level that canals might be made across the summits more easily than several summits already cut in this country.

In 1879, the project attracted attention, and Mr. Seymour, the chief engineer and surveyor of New York, became zealous for it, and in his letters of 1880, to the Chambers of Commerce of Duluth and Buffalo, acknowledged the value of the information supplied by Colonel Whittlesey.

Says the *Detroit Illustrated News* :

"A large part of the distance from the navigable waters of Lake Superior to those of Red river, about three hundred and eight miles, is river channel easily utilized by levels and drains or navigable lakes. The lift is about one thousand feet to the Cass Lake summit. At Red river this canal will connect with the Manitoba system of navigation through Lake Winnipeg and the valleys of the Saskatchewan. Its probable cost is given at less than four millions of dollars, which is below the cost of a railway making the same connections. And it is estimated that a bushel of wheat may be carried from Red river to New York

by water for seventeen cents, or about one-third the cost of transportation by rail."

We approach that part of the life of Colonel Whittlesey which was so valuable to our society. The society was proposed in 1866.* Colonel Whittlesey's own account of its foundation is: "The society originally comprised about twenty persons, organized in May, 1867, upon the suggestion of C. C. Baldwin, its present secretary. The real work fell upon Colonel Whittlesey, Mr. Goodman and Mr. Baldwin, Mr. Goodman devoting nearly all of his time until 1872 (the date of his death)." The statement is a very modest one on the part of Colonel Whittlesey. All looked to him to lead the movement and none other could have approached his efficiency or ability as president of the society.

The society seemed as much to him as a child is to a parent, and his affection for it has been as great. By his learning, constant devotion without compensation from that time to his death, his value as inspiring confidence in the public, his wide acquaintance through the state, he has accomplished a wonderful result, and this society and its collections may well be regarded as his monument.

Mr. J. P. Holloway, in his memorial notice before the Civil Engineers' club, of which Colonel Whittlesey was an honorary member, feelingly and justly said:

"Colonel Whittlesey will be best and longest remembered in Cleveland and on the Reserve, for his untiring interest and labors in seeking to rescue from oblivion the pioneer history of this portion of the state, and which culminated in the establishment of the present Western Reserve Historical society, of which for many years he was the presiding officer. It will be remembered by many here, how for years there was little else of the Western Reserve Historical society, except its active, hard working, president. But as time moved on, and one by one the pioneers were passing away, there began to be felt an increasing

*The society was organized under the auspices of the Cleveland Library Association (now Case Library). The plan occurred to the writer while vice-president of that association. At the annual meeting in 1867, the necessary changes were made in the constitution and Colonel Whittlesey was elected to the Case Library board for the purpose of heading the historical committee and movement. The result appears in a scarce pamphlet issued in 1867 by the Library Association, containing, among other things, an account of the formation of the society and an address by Colonel Whittlesey, which is an interesting sketch of the successive literary and library societies of Cleveland, of which the first was established in 1811.

interest in preserving not only the relics of a by-gone generation, but also the records of their trials and struggles, until now we can point with a feeling of pride to the collections of a society which owes its existence and success to a master spirit so recently called away."

The colonel was remarkably successful in collecting the library in which he interested with excellent pecuniary purpose, the late Mr. Case. He commenced the collection of a permanent fund which is now over ten thousand dollars. It had reached that amount when its increase was at once stopped by the panic of 1873, and while it was growing most rapidly. The permanent rooms, the large and very valuable museum, are all due in greatest measure to the colonel's intelligent influence and devotion.

I well remember the interest with which he received the plan; the instant devotion to it, the zeal with which at once and before the society was started, he began the preparation of his valuable book, 'The Early History of Cleveland,' published during the year.

Colonel Whittlesey was author of—I had almost said most, and I may with no dissent say—the most valuable publications of this society. His own very wide reputation as an archæologist and historian also redounded to its credit. But his most valuable work was not the most showy, and consisted in the constant and indefatigable zeal he had from 1867 to 1886, in its prosperity. These were twenty years when the welfare of the society was at all times his business and never off his mind. During the last few years Colonel Whittlesey has been confined to his home by rheumatism and other disorders, the seeds of which were contracted years before in his exposed life on Lake Superior, and he has not been at the rooms for years. He proposed some years since to resign, but the community would have felt that the fitness of things was over had the resignation been accepted. Many citizens of Cleveland recall that if Colonel Whittlesey could no longer travel about the city he could write. And it was fortunate that he could. He took great pleasure in reading and writing, and spent much of his time in his work, which continued when he was in a condition which most men would have surrendered to suffering.

Colonel Whittlesey did not yet regard his labors as finished. During the last few years of his life religion, and the attitude and relation of science to it, engaged much of his thought, and he not unfrequently contributed an editorial or other article to some newspaper on the subject. Lately these had taken more systematic shape and as late as the latter part of September, and within thirty days of his death, he closed a series of articles which were published in the *Evangelical Messenger* on "Theism and Atheism in Science." These able articles were more systematic and complete than his previous writings on the subject, and we learn from the *Messenger* that they will be published in book form. The paper says:

"Colonel Charles Whittlesey of this city, known to our readers as the author of an able series of articles on "Theism and Atheism in Science," just concluded, has fallen asleep in Jesus. One who knew the venerable man and loved him for his genuine worth, said to us that "his last work on earth was the preparation of these articles, which to him was a labor of love and done for Christ's sake."

Colonel Whittlesey said when the last was done that his work was finished. He was then in such a condition that he wrote only while in bed and on his back. On Sunday morning, October 17, 1886, he was seized with a chill. He seemed to recover somewhat and appeared no weaker than he had often been within the last few years, but in the morning of the next day he died at the early hour of five. The writer saw him last on Sunday afternoon, when he spoke as fondly, as anxiously and as thoughtfully of the society as ever, though his mind quickly wandered.

Colonel Whittlesey was married October 4, 1858, to Mrs. Mary E. (Lyon) Morgan* of Oswego, New York, who survives him; they had no children.

Colonel Whittlesey's published literary works were very numerous, commencing in 1833, and ending with his death,

* Mary E. Lyon was a daughter of James Lyon of Oswego, and sister of John E. Lyon, now of Oswego but years ago a prominent citizen of Cleveland. She m. first Colonel Theophilus Morgan,⁶ Theophilus,⁵ Theophilus,⁴ Theophilus,³ John,² James Morgan.¹ Colonel Morgan was an honored citizen of Oswego. Colonel Morgan and his wife Mary, had a son, James Sherman, a very promising young man, killed in 1864 in a desperate cavalry charge in which he was lieutenant, in Sherman's march to the sea. Mrs. Whittlesey survives in Cleveland.

fifty-three years afterward. There were four quartos among the "Smithsonian Contributions," several appear in the various states and United States geological reports. A collected volume of 'Fugitive Essays' was published in 1852, a 'History of Cleveland' in 1867. Quite a number appear among the publications of the American Association for the Advancement of Science. The list which follows is not complete. Colonel Whittlesey was so engaged in what was new, that it was only a few years ago and at my suggestion that he undertook a list. The list herewith is larger than his, and the number of books and pamphlets is one hundred and ninety-one. Many of these are double column and small print, but containing much new information. He cared little for large print or good paper. He furnished a great many articles to the newspapers, often as editorials, many of which may be found in the rooms of our society. Colonel Whittlesey was fortunate in simple tastes and happy life, but without fault on his part often unfortunate. We have seen how his work in the Ohio survey of 1837-8 was cut short; how, what would have been the great and leading work on the Archæology of Ohio, was lost, how other surveys and enterprises in which he was engaged were stopped by the war, or otherwise by no fault of his. Prior to 1869 he was pressing zealously, in this state, the project of a geological survey, and when the bill was finally passed, he fondly hoped to be chief of the survey in his own state. Another was appointed to the first place, and he was unwilling to accept the post of assistant geologist.

Much of his work does not therefore appear in that complete and systematic shape which would make it best known to the general public. But by scholars in his lines of study in Europe and America, he was well known and very highly respected. "His contributions to literature," said the New York *Herald*: † "have attracted wide attention among the scientific men of Europe and America.

As an American archæologist, Colonel Whittlesey was very learned and thorough. He had in Ohio the advantage of surveying its wonderful works at an early date. He had, too, that

† October 19, 1886.

cool poise and self-possession that prevented his enthusiasm from coloring his judgment. He completely avoided errors into which a large share of archæologists fall. The scanty information as to the past and its romantic interest leads to easy but dangerous theories, and even suffers the practice of many impositions. He was of late years of great service in exposing frauds, and thereby helped the science to a healthy tone. It may be well enough to say that in one of his tracts he exposed, on what was apparently the best evidence, the supposed falsity of the Cincinnati tablet so called. Its authenticity was defended by Mr. Robert Clarke of Cincinnati, successfully and convincingly, to Colonel Whittlesey himself. I was with the colonel when he first heard of the successful defense, and with a mutual friend who thought he might be chagrined, but he was so much more interested in the truth for its own sake, than in his relations to it, that he appeared much pleased with the result.

Among American writers, Mr. Short speaks of his investigation as of "greater value due to the eminence of the antiquarian who writes them." Hon. John D. Baldwin, in his *Ancient America*, speaks of Colonel Whittlesey "as one of the best authorities." That eminent Scotchman, Prof. Wilson, Sir John Lubbock, in his *'Prehistoric Times'*; the learned Frenchman, Marquis de Nadaillac, and the best writers generally upon such subjects, quote his information and conclusions with that high and safe confidence in his learning and sound views which is the best tribute to Colonel Whittlesey, and at the same time a great help to the authors. And no one could write with any fulness on the archæology of America without using liberally the work of Colonel Whittlesey, as will appear in any book on the subject. He was an extensive original investigator, always observing, thoughtful and safe, and in some branches, as in "*Ancient Mining at Lake Superior*," his work has been the substantial basis of present learning. It is noticeable that the most eminent gentlemen have best appreciated his safe and varied learning. Colonel Whittlesey was early in the geological field. Fifty years ago little was known of palæontology, and Colonel Whittlesey cared little for it, perhaps too little; but in economic geology, in his knowledge of

Ohio, its surface, its strata, its iron, its coal and its limestone ; in his knowledge of the copper and iron of the northwest, he excelled indeed: From that date to his death, he studied intelligently these sections. As Professor Lapham said, he was studying Wisconsin, so did Colonel Whittlesey give himself to Ohio, its mines and its miners, its manufactures, dealings in coal and iron, its history, archæology, its religion and its morals. Nearly all his articles contributed to magazines, were to western magazines, and anyone who undertook a literary enterprise in the state of Ohio that promised value, was sure to have his aid.*

In geology his services were great. The New York *Herald*, already cited, speaks of his help toward opening coal mines in Ohio and adds, "he was largely instrumental in discovering and causing the development of the great iron and copper regions of Lake Superior." Twenty-six years ago he discovered a now famous range of iron ore.

"On the Mound Builders and on the geological character and phenomena of the region of the lakes and the northwest he was quoted extensively as an authority in most of the standard geological and anthropological works of America and Europe," truthfully says the 'Biographical Cyclopaedia.'

Colonel Whittlesey was as zealous in helping to preserve new and original material for history as for science. In 1869 he pushed with energy the investigation, examination and measures which resulted in the purchase by the State of Ohio of the St. Clair papers so admirably, fully and ably edited by Mr. William Henry Smith, and in 1882 published in two large and handsome volumes by Messrs. Robert Clarke and Company, of Cincinnati.

Colonel Whittlesey was very prominent in the project which ended in the publication of the Margry papers in Paris. Their value may be gathered from the writing of Mr. Parkman (La Salle) and 'The Narrative and Critical History of America,' Volume IV., where on page 242 is an account of their publica-

*The Hesperian, American Pioneer, the Western Literary Journal and Review of Cincinnati, the Democratic Review and Ohio Cultivator of Columbus, and later the Magazine of Western History at Cleveland, all received his hearty support.

tion.* In 1870 and 1871 an effort to enlist congress failed. The Boston fire defeated the efforts of Mr. Parkman to have them published in that city. Colonel Whittlesey originated the plan eventually adopted, by which congress voted ten thousand dollars as a subscription for five hundred copies, and, as says our history: "At last by Mr. Parkman's assiduous labors in the east, and by those of Colonel Whittlesey, Mr. O. H. Marshall and others in the west," the bill was passed.

The late President Garfield, an active member of our society, took a lively interest in the matter, and instigated by Colonel Whittlesey used his strong influence in its favor. Mr. Margry has felt and expressed a very warm feeling for Colonel Whittlesey for his interest and efforts, and since the colonel's death, and in ignorance of it, has written him a characteristic letter to announce to the colonel, first of any in America, the completion of the work. A translation of the letter follows:

"PARIS, November 4, 1886.

"VERY DEAR AND HONORED SIR: It is to-day in France, St. Charles' day, the holiday I wished when I had friends so called. I thought it suitable to send you to-day the good news to continue celebrating as of old. You will now be the first in America to whom I write it. I have just given the check to be drawn, for the last leaves of the work, of which your portrait may show a volume under your arm.† Therefore there is no more but stitching to be done to send the book on its way.

"In telling you this I will not forget to tell you that I well remember the part you took in that publication, as new as it is glorious for the origin of your state, and for which you can congratulate yourself. In thanking you I have but one regret, that Mr. Marshall cannot have the same pleasure. I hope that your health as well as that of Madame Whittlesey is satisfactory. I would be happy to hear so. For me if I am in good health it is only by the intervention of Providence. However, I have lost much strength, though I do not show it. We must try to seem well.

"Receive, dear and honored sir, and for Madame, the assurance of my profound respect and attachment.

"PIERRE MARGRY."

*These papers were also described in an extract from a congressional speech of the late President Garfield. The extract is in Tract No 20 of the Historical Society.

† Alluding to a photograph of Colonel Whittlesey with a book under his arm.

Colonel Whittlesey was an original member of the American Association for the Advancement of Science, an old and valued member of the American Antiquarian society, an honorary member of the Ohio State Archæological and Historical society, with headquarters at Columbus. He was a trustee of the former State Archæological society (making the exhibition at the centennial), and although each of these is necessarily to some extent a rival of his pet society, he took a warm interest in the welfare of each, with an unselfish and characteristic devotion to what interested the public. In 1876 he worked hard and long in the preparation and care of the attractive and valuable archæological exhibition made by this society at the Centennial Exhibition at Philadelphia.

He was a member of the Society of Americanistes of France, and his judgment, learning and communications were much esteemed by the French members of that society. Of how many other societies he was an honorary or other member I cannot tell.

Colonel Whittlesey's views of the lives of others were affected by his own. Devoted to extending human learning, with little thought of self-interest, he was perhaps a little too impatient with others, whose lives had other ends deemed by them more practical. Yet after all, the colonel's life was a real one, and his pursuits the best as being nearer to nature and the public welfare and far removed from the adventitious circumstances of what is ordinarily called polite life.

He impressed his associates as being full of learning, not from books alone, but of all around—the roads, the fields, the waters, the sky, men, animals and plants. His conversation had a life and freshness far removed from that of the mere student of books. Charming it was to be with him in excursions; that was really life, and elevated the mind and heart.

He was a profoundly religious man, never ostentatiously so, but to him religion and science were twin and inseparable companions. They were in his life and thought, and he wished to and did live to express in print his sense that the God of science was the God of religion, and that the Maker had not lost power over the thing made.

He rounded and finished his character as he finished his life, by joint and hearty affection and service to the two joint instruments of God's revelation, for so he regarded them. His pastor, Rev. Dr. Hayden testifies: "He had no patience with materialism, but in his mature strength of mind had harmonized the facts of science with the truths of religion."

Colonel Whittlesey's life was plain, regular and simple. During the last few years he suffered much from catarrhal headache, rheumatism and other kindred troubles, and it was difficult for him to get around even with crutches. This was attributed to the exposure he had suffered for the fifteen years he had been exposed in the Lake Superior region, and his long life and preservation of a clear mind was no doubt due to his simple habits. With considerable bodily suffering, his mind was on the alert, and he seemed to have, after all, considerable happiness; and, to quote Dr. Hayden again, he could say with Byrd:

"My mind to me a kingdom is,
Such perfect joy therein I find."

C. C. BALDWIN.

BIBLIOGRAPHY OF COLONEL WHITTLESEY'S PUBLICATIONS.

The following list of Colonel Whittlesey's publications includes no newspaper articles which are not reprinted. They are octavo unless otherwise noted. Articles published by the American Association for the Advancement of Science are marked "A. A. S."

HISTORICAL.

- 1839.—Wisconsin Seven Years Since. The Hesperian, Cincinnati, Ohio.
Review of the Historical Transactions of Ohio. The Hesperian. Reprinted in Fugitive Essays.
- 1842.—A Sketch of the Settlement and Progress of Tallmadge. [Proceeds devoted to the town library.] Cleveland. 12mo., pp. 29.
Lord Dunmore's Expedition Against the Indian Towns upon the Scioto in 1774, an address before the Historical and Philosophical Society of Ohio, delivered in the Hall of Representatives at Columbus, January, 1840. 12mo., pp. 33.
Reprinted in Fugitive Essays.
- 1843.—A Sketch of the Location, Settlement and Progress of the City of Cleveland. Vol. 2, American Pioneer, Cincinnati. pp. 12. Reprinted in Fugitive Essays.
Drives, Vol. 2, Am. Pioneer. pp. 4.
Col. David Williamson and the Massacre of the Moravian Indians, 1782. Vol. 2, Am. Pioneer. pp. 8.
- 1844.—Early Discoveries in the Mississippi Valley. Cincinnati Directory of 1844. Reprinted in Fugitive Essays.
Indian Titles in Ohio. Democratic Magazine, Columbus, Ohio. (May No.) Reprinted in Fugitive Essays.
- 1845.—Agricultural Condition of Ohio. Ohio Cultivator, Columbus. (February No.)
Indian Tribes of the Northwest at the Time of the Revolution. Western Literary Journal and Review, Cincinnati, O. (January No.) Reprinted in Fugitive Essays.
- 1846.—Bouquet's Expedition into the Muskingum Country, October, 1764. An address before the Young Men's Library Association of Cleveland, December 17, 1846. pp. 18. Reprinted in Fugitive Essays.
- 1847.—Coal and Iron Trade of the Ohio Valley. Merchants' Magazine, New York. (May No.) Reprinted in Fugitive Essays.
- 1854.—Translation of Cass Manuscript Negotiations of M. Lignery, Green Bay, 1726. pp. 40.
- 1855.—Cass Historical Manuscript Translations :
1. Negotiations of M. Lignery, Green Bay, 1726.
 2. Customs of the Savages of Canada, 1723.
 3. Indian Council at Green Bay, 1726.
 4. Letter of M. De Longueil, 1726.
 5. Letter of Marquis De Beauharnais, 1726.
 6. Memoirs on the War with the Foxes, 1727.
 7. Reply of De Longueil to Gatineau, 1736.
 8. Memoir of the King on Canada, 1722.
 9. Petition of Habitans of Detroit, 1726.
 10. Reply of Gatineau to the same, 1726.
 11. Remonstrance of the Sieur De Tonty on the same subject, 1726.

- 1857.—Log Cabin, Times in Tallmadge. pp. 18. To be found in the Tallmadge Semi-Centennial Commemoration.
- 1864.—Major Gladwin and the Indian Girl, Detroit, 1763. Firelands Pioneer. pp. 4.
- 1867.—Early History of Cleveland, Ohio, including original papers and other matter relating to the adjacent country, with Biographical Notes of the Pioneers and Surveyors. Square 8vo. pp. 487. Cleveland. Cloth. 50 copies quarto, uncut. Illustrated.
- Address before the Cleveland Library Association. (Contains an account of the Literary and Library Societies of Cleveland.) pp. 10.
- 1870.—War of 1812. Papers of Elisha Whittlesey. W. R. H. S., Tract No. 3, p. 4.
- 1871.—War of 1812. Selection No. 2. pp. 4. W. R. H. S., Tract No. 7.
- Indian Affairs in Detroit, 1706. Papers of General Cass. Speech of Mishonaki and Reply of M. d Vandreuil. pp. 6. W. R. H. S., Tract No. 8.
- 1872.—The Universal Indian Problem. pp. 4.
- History of the Coal and Iron Business. pp. 8. Cleveland as it is, and reprint. Annual Meeting, May, 1872. pp. 4. W. R. H. S., Tract 10.
- Selection No. 3, War of 1812, from the papers of the late Elisha Whittlesey. pp. 4. W. R. H. S., Tract 12.
- Topographical and Historical Sketch of the State of Ohio, with an Historical Map of Ohio. Folio. Walling & Gray's New Topographical Atlas of Ohio, Philadelphia. Same reprinted with map, 34 pages.
- 1873.—Papers Relating to the Expedition of Col. Bradstreet and Col. Bouquet in Ohio, A. D. 1764. pp. 5. W. R. H. S., Tract 13.
- Same Selection Number 2. pp. 8. W. R. H. S., Tract 14.
- Correspondence of Major Tod, War of 1812. pp. 3. W. R. H. S., Tract 15.
- Annual Meeting, May, 1813. pp. 5. W. R. H. S., Tract 16.
- Correspondence of Major George Tod, Selection No. 2, War of 1812. pp. 5. W. R. H. S., Tract 17.
- War Correspondence Northern Frontier, 1812-14. Selection No. 6. pp. 5. W. R. H. S., Tract 18.
- Biographical Notices and Correspondence, War of 1812. Selection No. 7. pp. 4. W. R. H. S., Tract 9.
- Garnett's Escape. Illustrated. pp. 8. "Old and New" Boston.
- 1874.—Sixth Annual Meeting—Report of the President. pp. 3. W. R. H. S., Tract 21.
- Cleveland in the War of 1812. White Men as Scalpers. pp. 8. W. R. H. S., Tract 22.
- General Garnett's Escape, Cheat River Campaign, 1861, West Virginia. Vol. 2.
- 1875.—War of 1812, Correspondence. Selection No. 8. pp. 4. W. R. H. S., Tract 28.
- General Wallace's Division, Battle of Shiloh. Was it Tardy? pp. 8.
- Steam Scow and Railroad Car Attributed to John Fitch. Engraving. quarto. pp. 4. Memoirs Boston Society of Natural History.
- Discovery of Silver on Lake Superior. pp. 4.
- 1876.—Western Reserve, Origin of Title. pp. 6. W. R. H. S., Tract 32.
- Reunion of Twentieth Ohio Volunteer Regiment. Address, etc. pp. 10.
- 1877.—Discovery of the Ohio River by Robert Cavalier de La Salle, 1669-70. pp. 8. W. R. H. S., Tract 38; also Magazine of Western History, Vol. 1, 1884.
- 1879.—General Wadsworth's Division, War of 1812. pp. 9. W. R. H. S., Tract 51.
- 1881.—The State of Ohio—Sources of Her Strength. Address before the Western Reserve Historical Society. pp. 8. W. R. H. S., Tract 55.
- 1882.—Early Civil Jurisdiction, South Shore of Lake Erie. pp. 4. (Read before the Institute of Civil Engineers, of which he was an honorary member.)
- Battle of Shiloh Church.

- 1882.—The Cubit of the Ancients. pp. 10. American Antiquarian.
 1883.—Ohio Surveys. pp. 6. W. R. H. S., Tract 59.
 1884.—War Memoranda—Cheat River to the Tennessee, 1861-1862. Cloth. 90 pages.
 W. W. Williams, publisher, Cleveland, Ohio.
 Surveys of the Public Lands in Ohio—Map. pp. 8. W. R. H. S., Tract 61.
 Origin of the American System of Land Surveys—Justice to the Memory of
 Thomas Hutchins. pp. 4. Journal Association of Engineering Societies.
 Among the Otchipwees. Magazine of Western History, Vol. 1, December, 1884;
 January, 1885; February, 1885. pp. 32. Square 8vo.
 1885.—Wallace at Shiloh. Magazine of Western History, Vol. 2, No. 3. pp. 10.
 Square 8vo.
 How Order Reigned in Warsaw—An Episode of the Rebellion. Magazine of
 Western History, Vol. 1, April, 1885. pp. 5. Square 8vo.
 1886.—Col. Bradstreet's Misfortune on Lake Erie in 1764. Selection 3. pp. 3. W.
 R. H. S., Tract 67.

ARCHÆOLOGICAL.

- 1839.—Antiquities of America. Hesperian, July number.
 1850.—Ancient Earth Works in Ohio. Quarto. 7 plates. Smithsonian Contributions.
 pp. 20. Vol. 3, Article 7.
 1852.—The Ancient Miners in Lake Superior—Annals of Science (Cleveland). Vol. 1,
 pp. 8.
 1862.—Ancient Mining on the Shores of Lake Superior. Quarto. pp. 29. Colored
 Folding Map and Illustrations. Smithsonian Contribution.
 1865.—Mound Builders in Ohio.
 1867.—On the Weapons and Military Character of the Mound Builders. Read March,
 1867, before the Boston Society of Natural History, and in their Memoirs,
 Vol. 1, part 4. Quarto. pp. 10. Fine plate.
 1868.—On the Evidences of the Antiquity of Man in the United States. A. A. S.,
 Chicago Meeting. pp. 16.
 1871.—The Great Mound in the Etowah Valley. pp. 6. Indianapolis Meeting, A. A. S.,
 1871.
 Ancient Earth Works of the Cuyahoga Valley. pp. 40. Map and nine fine
 plates. W. R. H. S., Tract 5.
 1872.—Archæological Frauds. pp. 4. W. R. H. S., Tract 9.
 Ancient Rock Inscriptions in Ohio. Abstract. pp. 3. Indianapolis Meeting, A.
 A. S.
 Ancient Rock Inscriptions in Ohio. An Ancient Burial Mound in Hardin County,
 Ohio, and notice of some rare polished stone ornaments. pp. 16. Folding
 plates. W. R. H. S., Tract 11.
 1876.—Archæological Frauds. Illustrations. pp. 7. W. R. H. S., Tract 33.
 Antiquities of Ohio. Report of the Committee of the State Archæological Society
 (with Prof. M. C. Read). 60 pages—many illustrations. Plates.
 Ancient Rock Inscriptions in Ohio. pp. 11. Proceedings A. A. S., Detroit
 Meeting, 1875.
 1877.—Ancient Earth Works in Northern Ohio. Illustrations. pp. 8. W. R. H. S.,
 Tract 41.
 1878.—Rock Inscriptions in the United States. pp. 15. W. R. H. S., Tract 42.
 1879.—The Grave Creek Inscribed Stone. pp. 4. Illustrated. W. R. H. S., Tract 42.
 1880.—Relics of Aboriginal Art and Their Ethnological Value. Illustrations. pp. 4.
 W. R. H. S., Tract 52.

- 1881.—Inscribed Stones, Licking County, Ohio. pp. 5. Illustrations. W. R. H. S., Tract 53.
 1883.—The Cross and the Crucifix—Their Various Forms. pp. 4.
 Metrical Standard of the Mound Builders, deduced by the method of even divisors. pp. 8. Journal of Engineers.

GEOLOGICAL.

- 1838.—Report of Mr. Whittlesey, Topographer of the Geological Survey of Ohio. (First Annual Report on the Geology of Ohio.) pp. 12.
 1839.—Second Annual Report on the Geology of the State of Ohio. Mr. Whittlesey's Report. pp. 31. Table and folding plans.
 1843.—Elevations in Ohio and the Northwest. Am. Journal of Arts and Sciences, May No.
 1845.—A Dissertation upon the Origin of Mineral Coal. Cleveland. 12mo. pp. 24.
 Reprinted in Fugitive Essays.
 1846.—Copper Regions of Lake Superior. 12mo. pp. 64.
 1847.—General Geology of Ohio, with map. Pamphlet.
 1848.—Diluvium or Drift of Ohio and the West. Illustrations. pp. 12. Am. Journal of Arts and Sciences, March number.
 Outline Sketch on the Geology of Ohio, with outline map of the geological formation of Ohio. pp. 13. (Howe's Historical Collections of Ohio.)
 1849.—Age of the Material Universe. Western Quarterly, Cincinnati, O.
 1850.—Description of a Coal Plant Supposed to be New. pp. 3. (Cut.) Am. Journal of Arts and Sciences, July number.
 Drift Terraces and Ridges South Shore of Lake Erie.
 1851.—The Equivalency of the Rocks of Northeastern Ohio and the Portage, Chemung, and Hamilton Rocks of New York. pp. 16. Proceedings A. A. S., Cincinnati Meeting.
 Prize Essay of Soils. Ohio Agricultural Report.
 In the Report on the Geology of the Lake Superior Land District, by J. W. Foster and J. D. White, published by the United States Government, are the three following :
 Sections from Wolf River, Wisconsin, to Lake Michigan (plat), with remarks upon the section from the Falls of Wolf River through Navarino to Lake Michigan. pp. 17. (173-191.)
 On the Observed Fluctuations of the Surface of the Lakes. pp. 21. (319-340.)
 Magnetic Variations—Comparison of Terrestrial and Astronomical Measurements. pp. 19. (840-859.)
 1852.—Drift of the Northern and Western States. pp. 2. Annals of Science, Cleveland.
 Report of Explorations on the South Side of Lake Superior in Wisconsin, 1869, with fine map. Quarto. pp. 23. Owen's Geological Report, Washington.
 1853.—Western Reserve Coal Field. Illustrated, pp. 3. Annals of Science, January.
 Occurrence of Bitumen in Sedimentary Rocks. Illustrated. pp. 5. Annals of Science, May number.
 1854.—Drift Etchings, Lake Superior. Illustrated. pp. 3. Annals of Science, March.
 Allegheny Coal Field, Physical Characteristics. Annals of Science, May number.
 Agricultural Resources of the Upper Peninsula of Michigan. Michigan Agricultural Report, November.
 1855.—The Montreal River Copper Location. (Not known, but cited in 3 Wisconsin Geological Survey, p. 20.)
 Annual Report on the Eagle River Mining Company. pp. 32. Pamphlet.
 Preglacial Channel of Eagle River, Lake Superior. Pamphlet. Boston, Mass.
 1856.—Report on the Mineral Ridge Mining Property, Trumbull County, O. pp. 16.

- 1856.—St. Louis and Vermillion River. Minnesota, Geological Journal, August, 1848.
pp. 12. (No date.)
Ferruginous Quartz from Menominee River. pp. 12. Proceedings Cleveland
Academy Natural Science, December 11, 1856.
Natural Terraces and Ridges on Lake Erie. pp. 9. Am. Journal of Science.
Geological Map of Ohio, 2 x 2 feet. J. H. Colton & Co., New York.
- 1857.—On the Drift Cavities or Potash Kettles of Wisconsin. pp. 24. Proceedings A. A. S.
Origin of the Azoic Rocks. Same.
- 1863.—The Penokie Mineral Range, Ashland County, Wisconsin. Quarto. pp. 10.
Proceedings Boston Society of Natural History.
- 1864.—Fresh Water Glacial Drift of the Northwest. Quarto. Illustrations and Maps,
one colored. Smithsonian Contributions.
Coal Beds near Darlington, Pennsylvania. pp. 8.
Property of the Chicago Copper Mining Company. pp. 3.
The Lower Limestone Group Coal Series of Eastern Ohio. pp. 8. Proceedings
of Institute of Ohio Mining Engineers.
The Ponokee Copper Range, (Pamphlet not found but cited by Wisconsin Survey
Vol. 3, p. 215.)
- 1865.—Marangoin River Iron Property, Ashland Co. pp. 8.
Opinoke (or Potaloe) River Property, Ashland Co. pp. 3.
Montreal River Copper Location, Ashland Co. pp. 5.
Tyler's Fork Location, Ashland Co. pp. 3.
Mineral Resources of the Rocky Mountains. pp. 64. Colored Map. Small octavo.
- 1866.—Report on Three Mining Locations of the Pittsburgh & Lake Angeline Iron Co.
in Marquette County, Michigan. pp. 8.
Elevation of the Great Lakes above the Sea. pp. 2.
- 1867.—Abstract of Remarks on the Occurrences of Iron in Masses. pp. 10. Proceedings
A. A. S.
On the Ice Movement of the Glacial Era in the Valley of the St. Lawrence. pp. 12.
Proceedings A. A. S.
Depression of the Ocean during the Ice Period. pp. 9. A. A. S. Burlington
Meeting.
- 1869.—Physical Geology of Northeastern Ohio. Quarto, pp. 9, plate and elegant map. Pro-
ceedings Boston Society Nat. History and read before that Society Feb. 2, 1869.
- 1872.—Report upon the Magnetic Iron Property Ashland County, Wis. Map, pp. 7.
Straitsville, Ohio, as a point for making Iron. pp. 4.
Lake Komon Iron Property, Oconto County, Wisconsin. Map, pp. 4.
- 1873.—Origin of Mountain Chains, pp. 4. Proceedings of A. A. S., Portland Meeting.
The Dip of the great Straitsville Coal Seam, Ohio. pp. 4.
- 1875.—Abstract of the Physical Geology of Lake Superior. Illustrations and Map. Pro-
ceedings A. A. S., Detroit Meeting.
Physical Structure of the Ohio Coal Field. pp. 7. A. A. S.
Physical Geology of Lake Superior. pp. 12. A. A. S.
- 1875.—Lone Rock Silver Mining Property Ontonagon county, Michigan. Map. pp. 4.
- 1877.—Iron River Silver District, South Shore Lake Superior. pp. 8. Illustrations.
Scientific Publishing Co.
On the Origin of Mineral Veins. pp. 4. Proceedings A. A. S., Buffalo Meeting,
August, 1876.
Great Coal Seam Region, Ohio. Comparison of Strata. pp. 7. Illustrated.
Iron Ores of the Great Seam Coal Region. Plate, pp. 4.
- 1878.—Dip of the Great Coal Seam, Ohio. pp. 4.
Geology of Portage County, Ohio.

- 1878.—General Geology of the Counties of Columbiana, Stark and Tuscarawas. Large 8vo. pp. 8. Report of Secretary of State of Ohio.
Glaciation Kelley's Island, Lake Erie. pp. 7. A. A. S.
1879.—Elevations in Ohio. pp. 15. Report of Secretary of State of Ohio.
1880.—The Menominee Iron Region. pp. 4. Read before the Kirtland Society of Natural Science.
1881.—Great Seam Coal, Straitsville, Ohio. pp. 6. Map.
1884.—The Ice Era in Ohio. pp. 3.
1885.—Forks of the Cuyahoga Pre-Glacial, Inter-Glacial and Post-Glacial. pp. 4.

BIOGRAPHICAL.

- 1844.—John Fitch, Justice to his Memory. Western Review, Cincinnati, O. July No. Memorial to the Kentucky Legislature as to the Grave of John Fitch. pp. 13.
1845.—Justice to the memory of John Fitch. pp. 12.
Life of John Fitch. 12mo. pp. 86. Sparks' American Biography, Vol. 6, 2d series.
1874.—Military Record of the Descendants of John Whittlesey and Ruth Dudley. pp. 14.
1885.—Personnel of the First Geological Survey of Ohio. pp. 15. 4 portraits, Magazine of Western History, Vol. 2, May, 1885, and separately.
Grant and Lee, an Estimate. Magazine of Western History, Vol. 2, September, 1885. pp. 7. Square 8vo.

SCIENTIFIC AND MISCELLANEOUS.

- 1839.—Rights of Authors outside of Copyright. Hesperian, Sept. No.
1845.—Vegetation and Manures. Western Farmer and Gardener, Cincinnati, March No.
1846.—Two Months in the Copper Regions of Lake Superior.
1851.—Rise and Fall of Water in the Great Lakes. Nat. Magazine, New York, Feb. No.
1853.—Railway Routes to Lake Superior.
1856.—Climate of Lake Superior. pp. 5. Northwestern Medical Journal, Chicago. February number.
1858.—Chronology of Trees, Comparison of degrees of growth. pp. 5 with tables.
1859.—Fluctuation of Water Levels, Green Bay, Wisconsin. pp. 4 and folding plat. Am. Jour. of Science and Arts.
Fluctuations of Level on the North American Lake. pp. 7. Proceedings A. A. S.
Fluctuation of Level North American Lakes. quarto. pp. 25, 2 plates. Smithsonian Contribution.
1860.—Dissolution of Field Ice.
1864.—Combination sent for Army purpose. Cuts. pp. 6.
1871.—The Earthquake of October, 1870—Its rate of Progress. pp. 3. Proceedings A. A. S., Indianapolis Meeting.
1873.—Rate of Increase of the Human Race. pp. 10, folding plate. Proceedings A. A. S., Portland Meeting, August, 1873.
On the cause of the Transient Fluctuation of Level in Lake Superior. pp. 5. Proceedings A. A. S., Portland Meeting.
Descent of Rivers in the Mississippi Valley Area of Drainage 1,000,000 square miles. pp. 5. Proceedings A. A. S., Portland Meeting.
1874.—Timber Question. pp. 3. (From Ohio State Journal.)
Cleveland as a Naval Depot. Report of Committee of Citizens. pp. 8. No date.
Sudden Fluctuation on the Upper Lakes. Records of Observation. pp. 5. Proceedings A. A. S., Meeting of 1874.
1877.—Origin of Storms. pp. 2. (Reprinted from Cleveland Leader).
1878.—Development of Electricity.

- 1852.—Fugitive Essays upon interesting and useful subjects, relating to the early history of Ohio, its geology and agriculture, with a biography of the first successful constructor of steamboats; a dissertation upon the antiquity of the material universe, and other articles, being a reprint from various periodicals of the day, By Charles Whittlesey, of the late Geological Corps of Ohio and of the United States. Hudson, Ohio: Sawyer, Ingersoll & Co., 1852. 12mo, pp. 397.
- ARTICLE I.—Review of the Historical Transactions of Ohio. *Hesperian*, October, 1839. pp. 24.
- " II.—Justice to the Memory of John Fitch. *Western Literary Review*, February, 1844. pp. 29.
- " III.—Early Discoveries in the Mississippi Valley. *Cin. Directory*, 1844. pp. 22.
- " IV.—Rights of Authors Outside of Copyright. *Hesperian*, Sept., 1839. pp. 15.
- " V.—Elevation of Places in Ohio, with Reference to the Geological Beds. *American Journal of Science*, 44, No. 1, 1843. pp. 6.
- " VI.—On the Origin of Bituminous Coal. M.C. Younglove, Cleveland, 1845. pp. 30.
- " VII.—Lord Dunmore's Expedition to the Scioto River in 1774. Sandford & Co., 1842. pp. 29. Address before Ohio Historical Society.
- " VIII.—Antiquities of America, Delefield's Enquiry, with their origin. Lahey's Appendix. *Hesperian*, July, 1859. pp. 25.
- " ix.—On the Natural Terraces and Ridges of the Lake Country. *Am. Journal of Science* July, 1856. pp. 13.
- " x.—The age of the Material Universe. *Western Quarterly Review*, 1849. Vol. 1, No. 9, 24.
- " xi.—Settlement and Progress of the City of Cleveland. *Am. Pioneer*, Vol. 1, January, 1843. pp. 18.
Rise and Fall of Water in Lake Erie. *True Democrat*, Cleveland, April 23, 1851, and Appendix 21.
- " xii.—The Coal and Iron Trade of the Ohio Valley. *Merchants' Magazine*, May, 1847. pp. 12.
- " xiii.—Bouquet's Expedition into the Muskingum Country, October, 1764. Address before Young Men's Literary Association, Cleveland, December 17, 1846. pp. 18. *Cleveland Herald*, December, 1846. pp. 18.
- " xiv.—Two months in the Copper Region. *National Magazine*, February, 1846. 60 pages.
- " xv.—On the agricultural interest and condition of Ohio—Yield of Wheat in Hamilton County, Ohio. Delivered in the Hall of Representatives, at Columbus, Jan. 29, 1845. 32.
- " xvi.—Relations of the Indian Tribes to the Whites, 1776. *Western Literary Journal and Review*, January, 1845. pp. 8.
- " xvii.—Indian Treaties and Grants of Title for the Territory of Ohio. *Democratic Magazine*, May, 1844. pp. 13.

RELIGIOUS.

- 1871.—Occupation of Rome.
- 1874.—Is Darwinism Heretical.
- 1875.—Science and the Bible.
- 1878.—The Ancient Belief in Immortality. pp. 3.
A Foreign Church in a Free State.
- 1879.—An Immutable Church.
- 1880.—Moral Responsibility of Scientists.
- 1886.—Theism and Atheism in Science. pp. 39
- i. Is Evolution Heretical?
- ii. Evolution in the Planetary and Stellar World.
- iii. Significance of Involuntary Activities.
- iv. Mosaic Cosmogony more Allegorical than Literal.
- v. Mutability of Science as a Moral Regulator.
- vi. The Law of Undulations.
- vii. The Brain and Nerve Mysteries.

THE
ORIGIN AND DEVELOPMENT
OF THE
ALMANACK.

PAPER READ BEFORE
The Western Reserve and Northern Ohio
Historical Society,
January 12th, 1887.
BY
SAM. BRIGGS.

"Here comes the Almanack of my True Date."

COMEDY OF ERRORS.

—TRACT No. 69.—

CLEVELAND, O:
LEADER PRINTING COMPANY, 146 SUPERIOR ST.
1887.

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THE ALMANACK.

ITS ORIGIN AND DEVELOPMENT.

*“ For I have smelt out of the musty sheets of an old almanack, that at one time or other, even he that jets upon the neatest and sprucest leather; even he that talks all adage and apothegm; even he that will not have a wrinkle in his new satin suit, though his mind be uglier than his face, and his face so ill-favouredly made, that he looks at all times as if a tooth-drawer were fumbling about his gums: with a thousand lame heteroclites more, that cozen the world with a gilt spur and a ruffled boot; will all be glad to fit themselves in Will Sommer his wardrobe and be driven like a Flemish hoy in foul weather, to slip into our school, and take out a lesson. * * * * All that are chosen constables for their wit go not to heaven.”*

—*Thomas Dekker, Gulf's Hornbook, 1609.*

A proper overture for a paper of this character would seem to require that it should be apologetic in its nature—the more so for the reason that the modern instances of the almanack, especially in America, are little more than advertising mediums through which in general the virtues of pills and potions are made known to suffering humanity.

To apologize, therefore, for this review of a class of literature so little esteemed at the present day, would seem to be a superfluity; only remarking that the recently developed taste for things ancient and strange have been the chiefest inducement towards its compilation.

No book or publication has ever been the subject of more ridicule and contempt than the almanack, yet no book has been more universally read, or more highly valued, or more serviceable to its day and generation.

From the earliest times and in all countries they have been consulted and treasured with an almost religious veneration, yet they have been the mark for the shafts of satire, more probably for the reason that they were made the vehicle for conveying to a superstitious public the pretentious prognostications of certain astrological quacks who, being aware of the desire of poor mortality for a glimpse of futurity, gratified their curiosity by "reading the answer in the stars."

An almanack pretends to but little repute, but strangely there has always been a demand for it, and though it has no ambition but to be useful for a few months, it is sought for and purchased by all, and in earlier times constituted the only reading matter in many families; the copies being preserved from year to year for the useful maxims and information which they contained, as well as the practical astronomy which they taught.

The contents of long-neglected garrets, and ancient chests and presses have been exhumed and re-habilitated for the decoration of the walls and mantels of modern apartments, and in this general resurrection the ancient "almanack" makes its appearance with its homely lore to ask also recognition as a shadow of the past, none the less worthy than its compeers, the spinning-wheel, the distaff, and the warming-pan.

In these little waifs is collated much that may be rated as chaff, but there is also much more that may furnish profitable food for reflection and amusement, and when we are aware that the almanack in early days constituted the only method of reaching the people generally, we appreciate the full importance of these publications and gain a clearer knowledge of the tastes and inclinations of the people among whom they were a popular and revered class of literature.

He who venerates the sacrifices made in and before the times which tried men's souls, will find in their pages soul-stirring appeals to his love of country, and in some of the articles therein published will note the seeds which were sown that led to political changes in the old world, that sent the despot tumbling from his throne, and that in America culminated in the establishment of the great Republic.

The modern politician may learn that his counterpart existed coeval with the foundation of government in all countries, and be assured that the same "glass eyes" attributed to his profession were provided in earlier days for a similar utility, and were as fully appreciated by the general public.

The clergyman may here find as much homely religious fervor and devotion as he could possibly desire in the most indifferent member of his flock.

The physician can perhaps cull from the quaint medical essays, and old women's remedies therein cited, both wisdom and amusement, if not some apparent trifle which being judiciously and learnedly administered may cause him much fame in his profession, or else the patient to reach eternal bliss by a less circuitous route. Persons who delight in "mery talys," if they may not find the fountain head of modern humor, will undoubtedly discover sufficient familiar faces to convince him that there is but little original on this planet in this department of literature, and that we are still largely dependent on what the world's people denominate "chestnuts" for subsistence of this character.

The poet may cool his brain with some very amusing vagaries of the Muse who appeared to sit at the elbows of the early "students in astronomy, and the mathematicks."

The agriculturist will, in their pages, become partly familiar with the ancient methods of coaxing Mother Earth to yield her store, some of which suggestions might possibly be applied with success to modern tillage.

The family historian, in some of the occasional interleaved diaries perhaps, may discover a "missing link" which may enable him to trace his pedigree—if not to a "pre-Adamite protoplasmic primordial globule," at least locate some humble individual of a past generation that may lead him to more encouraging researches.

The antiquarian and the student of folk-lore may also find in the almanack abundant field for the gratification of their peculiar hobbies by a general perusal of its contents, while the quaint maxims, proverbs and sayings will largely interest the general reader.

And lastly, those who believe in the influence of the stars upon mundane affairs, will find as much mystifying lore, and as many befogging diagrams as could be desired by any worshipper at the altar of the occult.

Notwithstanding the comparative insignificance of the almanack as a literary production, it has an undisputed pedigree, its ancestry being traceable to as remote a period as any written language has existed.

Its presence in a variety of forms, is found in all ages and among all nations, and the history of its origin and development from its birth to its golden age in the last century would be a volume of considerable magnitude.

Authors are divided in opinion concerning the etymology of the word. Some deriving it from the Arabic particle *al* and *manach*, to count. Some from *almanch*, or New Year gifts, because the Arabian astrologers used at the beginning of the year to make presents of their *Ephemerides*, or astronomical calculations, while others attribute its derivation from the Teutonic *almaen-achte*, or, observations on all the months.

Among all peoples there has been great curiosity manifested concerning the heavens and what exists beyond the confines of this terrestrial habitation of ours; in fact, mankind has been continually struggling to master the infinite. This, probably, was a wise provision—this innate spirit of investigation—for many persons whose tastes ran in this direction, might have found employment in pursuits less calculated to benefit themselves and their fellow creatures, had not kind fortune led them to star-gazing, thereby causing them to overlook other occupations which might have been quite annoying to their neighbors.

The observation of the stars gave rise to astrology, the kindred science of astronomy, and among the ancients the study of the latter gave rise to the belief that the planetary bodies exercised an influence over worldly affairs. The elaboration of this idea originated *judicial* and *natural* astrology. The first named pretending to the foretelling of the fates of nations and individuals, while natural astrology only predicted events of inanimate nature, changes of weather, etc.

Astrology had gained considerable popularity among the earlier nations. The Chaldees were familiar with it, and the Jews during the captivity are said to have practiced the science.

Among the Hindus it was known, and the tribes of Arabia were adepts in the art of forecasting the future by the stars. The Druids also possessed some knowledge of astronomy, and an ancient poem in the primitive Irish (Erse) tongue bears evidence that that nation had some astronomical knowledge at an early day.

The Arabians, however, appear to have been the most advanced students of the sciences of astronomy and astrology, and this nation being at an early period (prior to their expulsion from Spain) the

conservators of art and literature, were probably the first who introduced it into Europe.

Concerning the first publication of an almanack there has been much dispute.

It is related that one Appius Claudius who was engaged in an official capacity at Rome some years since, had in his employ a secretary named Flavius, whose occupation, in common with many persons of his profession, did not so thoroughly occupy his time as to preclude his giving some attention to the affairs of others. This very praiseworthy desire for the accumulation of knowledge found favor with Appius, who encouraged him to look into the mysteries of the priesthood; Appius evidently desiring to add some of their accomplishments to his other business specialties. The secret arrangement by which the priests knew and determined the recurrence of the holy-days devoted to the several gods, had long been a source of speculation to young Flavius, and this ancient prototype of Paul Pry finally made the discovery of the *fasti-sacri*, or *kalendares*, and exposed the entire scheme one morning at the Forum, exhibiting the white tablets to the assembled Senators. This is one account of the first publication of an almanack, and is said to have occurred about 300 years before the Christian era.

The history of written almanacks has not been traced farther back than the second century of the Christian era, at which period it is supposed that they were constructed by the Greeks of Alexandria.

Lalande, an investigator of early astronomical works, did not find any express mention of almanacks anterior to those published by Solomon Jarchus, A.D., 1150.

The earliest almanacks known to exist are in MS. of the twelfth century, and examples are to be found in the libraries of the British Museum, Cambridge and Oxford Universities.

In the Savilian Library at Oxford is a manuscript copy of the almanack published about the year 1300 by Petrus de Dacia, who is supposed to have been the originator of the "*homo-signorum*," the man of the signs, known in later similar publications as the "Anatomy." Peter was a firm believer in planetary influence, as is evident by his lines:

*"Jupiter atque Venus boni, Saturnusque malignus;
Sol et Mercurius cum Luna sunt mediocres."*

Contemporary with this author are recorded as almanack writers Roger Bacon, of gunpowder notoriety, 1292; and Walter de Elvendene, 1327.

At Oxford, formerly the seat of British science, were issued the earlier standard almanacks. Here were published the productions of John Somers, 1380; Nicolas de Lynne, 1386, and many others.

An almanack was printed as a literary curiosity in 1812, and was thus introduced :

Almanack for the year 1386. Transcribed verbatim from the Original Antique Illuminated Manuscript in the Black Letter; omitting only the monthly Calendars and some Tables. Containing many Curious Particulars illustrative of the Astronomy, Astrology, Chronology, History, Religious Tenets, and Theory and Practice of Medicine of the Age.

Printed for the Proprietor by C. Stower, Hackney, 1812.

The contents are—

1. *The Houses of the Planets and their Properties*; 2. *The Exposition of the Signs*; 3. *Chronicle of Events from the Birth of Cain*; 4. *To find the Prime Numbers*; 5. *Short Notes on Medicine*; 6. *On Blood-letting*; 7. *A Description of the Table of Signs and Movable Feasts*; 8. *Quantitates Diei Artificialis*.

As a specimen the following occurs under the head of—

“*Exposycion of the Synes—Aquarius es a syne in the whilk the son es, in Jan’y, and in that moneth are 7 plyos (pluviose) days, the 1, 2, 4, 5, 6, 15, 19, and if thoner is heard in that moneth, it betokens grete wynde, mykel fruit and batel. Aquarius is hote, moyste, sanguyne, and of that ayre it es gode to byg castelles, or hous, or to wed.*”

Arabic notation had then been but recently introduced, and was imperfectly understood, as the clumsy method of expressing more than two figures would indicate, thus 52MCCC20 is put for 52,320.

The earliest specimen in the British Museum is entitled an “English Calender,” and is dated 1431. In the Library at Lambeth is a manuscript almanack for the year 1460, with the eclipses noted until the year 1481. The University at Cambridge also possesses a similar manuscript of the date 1482.

After the invention of printing, almanacks were among the first printed books.

The first printed almanack bears imprint 1457.

KL

Januarius

	Sol	capit	medi9 motus lune	medi9 argum lune	caput draco	ascensiones vel cuiuslibet grad	signoz thaurus
	g m	g m	g g	g g	g m	hore m	grad
1 A	20 3	0 13	0 13	0 3	1	24	8
2 b	21 4	0 26	0 26	0 8	1	28	10
3 c	22 6	1 10	1 9	0 9	1	32	11
4 d	23 7	1 23	1 22	0 13	1	36	13
5 e non	24 8	2 6	2 5	0 16	1	40	15
6 f	25 9	2 19	2 18	0 19	1	44	16
7 g	26 11	3 2	3 1	0 22	1	48	18
8 A	27 12	3 15	3 15	0 25	1	52	19
9 b	28 13	3 29	3 28	0 28	1	56	20
10 c	29 14	4 12	4 11	0 32	2	0	22
11 d	0 16	4 25	4 24	0 35	2	4	24
12 e	1 17	5 8	5 7	0 38	2	8	25
13 f	2 18	5 21	5 20	0 41	2	12	27
14 g	3 19	6 4	6 3	0 44	2	16	28
15 A	4 20	6 18	6 16	0 48	2	20	30
16 b	5 21	7 1	6 29	0 51	2	24	gemin
17 c	6 22	7 14	7 12	0 54	2	28	2
18 d	7 23	7 27	7 25	0 57	2	32	4
19 e	8 24	8 10	8 8	1 0	2	36	5
20 f	9 25	8 24	8 21	1 4	2	40	6
21 g	10 26	9 7	9 4	1 7	2	44	7
22 A	11 27	9 20	9 17	1 10	2	48	9
23 b	12 28	10 3	10 0	1 13	2	52	10
24 c	13 29	10 16	10 14	1 16	2	56	11
25 d	14 30	10 29	10 27	1 19	3	0	13
26 e	15 31	11 13	11 10	1 23	3	4	14
27 f	16 31	11 26	11 23	1 26	3	8	15
28 g	17 32	0 9	0 6	1 29	3	12	16
29 A	18 33	0 22	0 19	1 32	3	16	18
30 b	19 33	1 5	1 2	1 35	3	20	19
31 c	20 34	1 18	1 15	1 38	3	24	20

hap

Impressum Ulme per Johannem Zainer
Anno domini incarnationis. 1478.

Reduced fac-simile of a page from an Almanack printed
at Ulm in 1478, by John Zainer.



Regio-Montanus appears to have been the first in Europe who reduced the almanack to its present form and method, gave the characters of each year and month, foretold the eclipses and other phases, calculated the motions of the planets, etc. He printed an almanack at Nuremburg in 1472, which embraced three Metonic Cycles, or the fifty-seven (57) years, 1475-1531, inclusive. He is said to have been a pupil of the early astrologer, Anton Purbach, who compiled an almanack about 1450-1461, and was at that period placed in his tutelage under the patronage of Mathias Corvinus king of Hungary, which monarch richly rewarded Regio-Montanus for his *Kalendarium Novum*, which he published for three years at Buda from the press of Martin Hikus. This work found ready sale in Europe at fabulous prices, and was followed by the publications of Bernard de Granolache at Barcelona, 1487, Engel of Vienna, 1491, and Stauffer of Tubingen 1524.

1497.

The earliest almanack known to have been printed in England was "*The Sheapheard's Kalendar*," translated from the French and printed by Richard Pynson, 1497.

The influence of the planets is thus set forth :

*"Saturne is hiest and coldest, being full olde
And Mars with his bluddy swerde ever ready to kyl.
Sol and Luna is half good and half yll."*

The general quality of the verses over each month may be known by this specimen for January :

*"Called I am Januyere the colde
In Christmas season good fyre I love.
Yonge Jesu, that sometime Judas solde
In me was circumcised for man's behove.
Three kynges sought the Sonne of God above;
They kneeled downe, and dyd him homage, with love
To God their Lorde that is man's own brother."*

About the same period appeared an almanack in black letter, entitled :

"Almanacke for XII Yere. Lately corrected and empynted in the Flete Strete by Wynkyn de Worde. In the Yere of the reyne of our most redoubted soverayne Lorde Kyng Henry the VII."

The general quality of the almanacks for the sixteenth century may be known from the following titles :

1550.

“ A Prognossicacion and an Almanack fastened together, declaring the Dispoission of the People and also of the Weather, with certain Electyons and Tymes chosen both for Physike and Surgerye and for the husbandman. And also for Hawkyng, Huntyng, Fishyng, and Fowelynge according to the Science of Astronomy. made for the yere of our Lord God M.D.L. Calculated for the Merydyan of Yorke, and practised by Anthony Askham.”

“Imprynted at London, in Flete Strete, at the Signe of the George next to Saynt Dunstan’s Church, by Wylliam Powell, *cum privilegio ad imprimendum Solum.*”

The title to the Prognostication is :

“A Prognossicacion for the Yere of our Lorde, M.CCCCC.L. Calculated upon the Merydyan of Anwarpe and the Country thereabout, by Master Peter of Moorbecke, Doctour of Physicke in the same Towne; whereunto is added the judgment of M. Cornelius Schute, Doctour in Physicke of the Towne of Bruges, in Flanders, upon and concernyng the Disposicion, Estate and condycion of certaine Princes, Contreys and Regions, for the present Yere, gathered out of his Prognossicacion for the present Yere. Translated oute of Duch into Englyshe by Wylliam Harrys.”

“Imprynted at London by John Daye dwellyne over Aldersgate, and Wylliam Seres dwellyne in Peter Colledge. These Bokes are to be solde at the Newe Shop, by the Lytle Conduyte in Chepesyde.”

1551.

“ An Almanacke and Prognostycatyon for the Yeare of our Lorde MDLI, practysed by Simon Henringius, and Lodowyke Boyard, Doctors in Physike and Astronomy, &c., at Worcester in the Hygh Strete.”

1558.

“A New Almanacke and Prognostication collected for the Yere of our Lorde M.DLVIII, wherein is Expressed the Change and Full of the Moone with their Quarters. The Vârietie of the Ayre and also of the Windes, throughout the whole Yere, with Infortunate Times to Bie and

Sell, take Medicine, Sowe, Plante and Journey, &c. Made for the Merydyan of Norwiche and Pole Arcticke LII Degrees and serving for all England. By William Kenningham, Physician."

"Imprinted at London by John Daye, dwelling over Aldersgate."

1569.

"An Almanack and prognostication for the yere of our Lorde God, 1569, serving for all Europe, wherein is shewed the nature of the Planettes and Mutations of the Ayer, verie necessarie for all Marchauntes, Marineres, Students and Travelers, bothe by sea and lande. Calculated and gathered by Joachim Hubrighe, Doctour of Physicke and Astronomie of Midelborowe in Sealand; whereunto is annexed a profitable rule to knowe the Ebbes and Fluddes for Marineres; also their courses, soundynges, markes and daungers, all along the coaste of Englande and Normandie; also all the principall Faies and Martes, and where and when they be holden; mete for all those that use the trade thereof. Imprinted at London by Jhon Kyngston for Wm. Pickeryng." This almanack makes especial note of the "dayes good to sett and sowe, to take medicines, to lett bloude, to cut heares, and fortunate and unfortunate dayes," also "the daily disposition of the weather, *with the juste hower and minute of the chaunge.*"

March 3. "Eclipse of the Moone, which bringeth with it verie pestiferous fevers, and other diseases, whyche the Lorde dothe sende among us onely for synne, except we speedily repente."

"NATURE OF THE PLANETTES."

"*Saturne* is cold and drie: the purse in his hand betokeneth gettynge of money, and the sitting on the chaier betokeneth restynge to wait on his riches. He governs long peregrinations, laboures, slouth, and affliction; fathers, grandsiers, brothers, servants, and base menne; al black clothes, the inner part of the eare, the spleene and the stomacke."

"*Jupiter* is the best planett in heaven, most frendlye to manne; he maintaines Life, governs the Sanguine, signifyes great menne of estate and the Clergy, signifyer of substaunce, of ages, youth of maistieres; he is the planett of Wisdome, Understandyng, and use Thynges; of manne he rules the lightes, stomache, left eare, arme, and bellie."

"*Mars* is hot and drie, and the crow that he beareth sheweth that as a Raven dothe love ded flesh or carren, right soe doth Mars love to slea menne, he maketh all cursed purverse workes in all nativities; also he holdeth iron, delyghtyng in bloudshed, all thynges done by fier—shortning of journies, and the gathering together of captaines.

"*Mercurie* is variable like as the cocke bloweth above all other fowles, so is this planet hier in imagination of wisdom, and he is stronger than anie other planet; he ruleth quicksilver; he is good with the good, and yll with the evill; he Signyfyes predication, Rhetoric, Geometrie, Philosophie, foresight, versifying. He rules Wednesdaie and Sondaie nighte."

1589.

"An Almanack and Prognostication for 1589 by Gabriel Frende."

This man appears to be the precursor of Doctor Sangrado, and doubtless would have thoroughly endorsed "Col. Pride's Purge," of the Cromwellian Epoch, for he prescribes "phlebotomy and evacuation" for nearly every month in the year, as witness two samples from the months named:

"In May thou may'st with safety
Both Bath and take Purgation;
Use Vomit and Phlebotomy,
And Eyke evacuation."

* * * * *

"September yeeldes frutes pleasantly.
Refrayne, eat not thy fyll.
Take medicine, use Phlebotomy;
Now spice in meates not yll."

After “Finis,” he salutes the “Virgin Queen” with a hearty “God save Queen Elizabeth;” and in his valedictory, the Muse prompts these lines :

“Thou hast my guess at daily weather
Here present in thy view.
My credit shall not lie thereon
That every word is true :
Yet some to please I thought it best
To shew my mynde among the reste.”

The following titles and excerpts will show the general tendency of the almanacks of the first half of the seventeenth century. It will be observed that the “end of the world” was as confidently expected then as in the days of “Millerism,” two hundred years later.

The simplicity of medical treatment will also be noted. Complaints were few—“squinancie” and “vapours” predominated, and the virtues of certain “pills” and the “spirits of scurvy-grass” much extolled. Doubtless the ills mentioned still afflict the world, but under such thoroughly latinized titles as cause them to be proportionately expensive to cure. The *materia medica* in those times was limited—the back garden providing nearly all that was required. All that was necessary for the physician was an astrological almanack, a few simple instruments and a patient with a strong constitution, to render his success certain and his reputation secure.

1606.

“An Almanack for 1606, imprinted for the Company of Stationers’ in a very “smal and Portable Manuel” contained the Psalter and the Order for Morning and Evening Prayer as well as the Calendar, on the bottom of the pages of which for the months quoted, are the following quaint and practical couplets :

Februarie.

“Now everie day set hops you may,
And set for thy pot best hearbes to be got.”

April.

“Heare barke go sel ere timber ye fel.
The best that ye knowe for staddles* let growe.”

*Hay-stack supports.

October.

“Now sowe thou thy wheate to sel or to eate;
Sowe also thy rie, if October be drie.”

December.

“Your timber cut downe; take birds that abowne,
With net or with lime; and thus ends my rime.”

1624.

JOHN RUDSTON.

January.

“Now is't a time unmeet to bleed,
Yet Baths with counsell thou maist use.
It is not good to purge, sweat, bleed;
No Physicke take, sweet drinks refuse.”

February.

“Milke, fennish Fowle, and Physicke flye;
Bathe, but use not Phlebotomy:
Take heed of cold, feed warily,
Lest agues breed thy misery.”

March.

“Humours this month in man abound;
Let food therefore be choice and sound.
No Physicke take, we purge nor bleed,
But by learn'd counsell and good heed.”

April

“Now nature doth resume her power,
Pores opened are, and blood increase;
Therefore this month doth bear the flower,
To cure by Physicke thy disease.”

May.

“Take Physicke's ayd for malady,
Use sage thy drinks to qualifie;
Rise early, traverse pleasantly
The Fields that smell most fragrantly.”

June.

“This month bid spices hot adieu,
Coole meates and herbs are now the best ;
To bathe, purge, bleed doe now eschew
If you do love your health and rest.”

July.

“In Iune what is prescribed for health
Accordeth best with Iuly's heat :
Coole Baths, to wit in chrystall streames,
Coole hearbs likewise and coolest meate”

August.

“This month the Dogs starre violently
Doth heat the blood and humours frie ;
No Physicke or Phlebotomy
Helps now, but breeds infirmity.”

September.

“Ripe fruits, but sound in measure eate,
Now spice you may eate with your meate.
Now Dog dayes gone, bathe, purge, and bleed,
And Physicke take, if that you need.”

October.

“With good hot broths, and vestures warme,
From cold the body keepe ;
Good store of food will doe no harme.
Drinke old good wine, and largely sleepe.”

November.

“Now in thy meates use spicery,
But use ye no Phlebotomy ;
For Winter's cold Extremity,
Thereby may breed infirmity.

December.

“Let passion's absence, mind secure ;
Let warmth thy bodies' health procure.
Then bodies' health, mind tranquiliz'd,
Will deem its state emparadiz'd.”

1625.

RICH: ALLESTREE.

“A Prognostication for this present yeare of Grace 1625
A subject well meriting the probation of the Iudicious
Who best know how to confirme their knowledge.

* * * *

Whereunto is annexed a compendious Table to
Know the Crisis of any man that falleth sicke.”

“I marry sir. I count it not amisse
Sir envious Critike ruminare on this :
More things if’t pleased me, doth beate my braine
Could I reveale, but that’s a fruitlesse paine.
Thinke Momus, speake, do what you will, you’re free,
Your deeds, your words, your thoughts are nought to mee.”

“When you would purge any part of man’s body, let not the Planet which is significator of the part of the strong or fortunate in the Heaven (if you can tell when it is.) For example, purge not the gall, Mars being fortified. You shall have the parts of man’s body, which the Planets are attributed unto set downe for your better knowledge in the fifth page within my almanacke. Stop humours, fluxes or rheumes, the Moone in *Tauro*, *Virgine* or *Capricorno*. Observe that medicines are better to be given in the decrease or wane of the Moone than in her increase or spring.

“Enter into bathes for hot diseases, let the Moone bee in Virgo, Cancer or Scorpio; for cold diseases in Aries, Leo, or Sagittary. Those dayes in which the Moone goeth to the opposition of Saturn are very unwholesome (saith the Astronomer) to take a purgation in, but most fit to provoke vomit.

“An unguent or plaister is best applied when the Moone is in the imaginary signe attributed to the member whereunto it is applied. But above all remember where the Physitian is not paid the disease goeth backward.

*“Anatomy of wonder great I speake, and yet am dead.
Men sucke sweete juice from these blacke veines, which mother
wisdome bred.”

1633.

EDWARD POND.

Abreviate of the Foure Termes of Law.

“The first of *Hilarie Term* shall be
On Januarie the twenty-three
And on the twelfth of February
This Term doth end most certainly,
And *Easter Term* from Easter day.
The Wednesday fortnight ’gins alway,
And when th’ Ascension day is past
Till Monday next the Term doth last.
On Friday after *Trinitie*
This Term begins assuredly
And as our Lawyers all do write
It ends the Wednesday fortnight.
If *Michaelmas Term* you seek to find
The ninth of October bear in mind,
It ends as I doe well remember
The twentie-eight day of November,”

“Short lines Termes commence end
be the of and ing
Long times cares, turmoyles spend”

The Anatomie.

“Should I but dare t’ omit the *Anatomie*,
Which long enough hath gul’d my country friend,
He with contempt would straight refuse to buy
This book, and ’t is no *Almanack* contend.
Ask him its use, he’le say he cannot tell;
No more can I: yet since he loves ’t so well,
P’le let it stand, because my Book should sell.”

*Evidently a tribute to printer’s ink.



hearing, ease the Stone, dissolve the congealed and melancholly blood and humours. But for the better performing and effectual working in these cases, the counsell of the learned Physition is to be desired who will consider many Astrological observations necessary in Blood-letting.

“The best time to sweate in, are the Moone being in Aries, Leo, and Sagittarius.”

1653.

JOHN VAUX.

A Prognostication.

“Now it is evident out of *Genesis*, ch. 5, that from Adam unto the Flood be passed 1656 years; it is likewise true how the end of the world by Fire shall be approaching to the like year of our Lord 1656; and if so? it is even at the door.

“The end of all things is at hand,
Now therefore wo unto that land
That doth not now with speed begin
To turn to God and shake off sin.
For Nation doth 'gainst Nation rise
And fearful Signes appear in Skies
Of that same day that's comming on
Which many one least think upon.
Deferre not therefore, but convert
To-day, and burden not your heart,
Lest that you cry when time is gone,
O Lord that we had not so done,
For then the Lord will stop his ear,
And your complaints by no means hear.

* * * * *

“And seeing that the signes forewarning of our last day are continually in our sight, and that the propheticall Scriptures are perfectly accomplished so that in all probability the Sixth day of the world's week is neer expired, I will conclude as I began, *Watch and Pray.*”

“The state of Fortune alt’reth soon
Even with the image of the Moon
That’s constant with unconstantness,
Now waxing full, then wayning less.”

The prophecies of Merlin were published at Paris, 1498; London, 1529–1533; Venice, 1534. He was surnamed Ambrosius, and lived during the 5th century, and his reputed parents were a demon and a Welsh princess, though both Scotland and Wales claimed the honor of his birthplace. He displayed remarkable prophetic powers from his infancy, and possessed some astrological knowledge.

He is incidentally referred to by Shakspeare, Spencer, and Tennyson, and his name gave title to some of the English almanacks of the 16th and 17th centuries.

In England, almanacks began to get into common use in the latter years of the reign of Henry VIII, and continued to increase in popularity with each succeeding year.

Leonard Digges, a mathematician of some repute in the reign of Elizabeth, was the author of a “Prognostication” which was several times issued under the superintendence of himself and his son Thomas Digges during the period 1553–1605.

During the sixteenth and seventeenth centuries the almanack attained what might be termed the golden age.

They were the most popular publications in Europe, and during this period astrology reached the pinnacle of popularity.

Everybody, high and low, the learned and the ignorant, found something to interest in their pages. Planetary influence and “lucky days” were respected, and all classes found manifold excitement in prognostications more or less direful. The astrologer ruled “destiny’s dark counsel,” and royalty itself often trembled before impending misfortunes in the conjunction of planets; pestilence in eclipses, and death and ruin of kingdoms in the advent of a comet.

Astrologers, quick to take advantage of the popular superstition, began to make political predictions; and prognostications were consequently regarded as the most important part of an almanack.

Nostradamus Michael, born at St. Remy, France, 14 December, 1503, d. 2d July, 1566, was a mathematician, philosopher and physician, and in the latter profession gained considerable fame before becoming noted as a “mystagogue.” He studied astronomy, and published an almanack which became very popular, so much so that

imitations of them were published, which imitations being attributed to him, and containing nothing but folly, caused the poet Jodelle to satirize him :

*“Nostra damus cum falsa damus, nam fallere nostra est,
Et cum falsa damus, nil nisi Nostra damus.”*

That is—

“We give our own things when we give false things, for it is our peculiarity to deceive, and when we give false things, we are only giving our own things.”

Some of his prophecies published in 1555 attracted the attention of royalty, and Henry II sent for him to consult him in reference to his children. Charles IX and his mother Catharine de Medici also had much faith in his predictions.

He had the reputation of foretelling the death of Henry II (which monarch died in 1559.) The prediction made in 1555 reads somewhat ambiguously as follows :

*“Le Lion jeune le vieux surmontera,
En champ bellique par singulier duelle,
Dans cage d’or l’oeil il lui crevera,
Deux playes une puis mourir mort cruelle.”*

Or,—

“The young lion shall overcome the old one
In martial field by a single duel.
In a golden cage he shall put out his eye,
Two wounds from one : then shall he die a cruel death.”

Henry received a wound in the eye from a splinter of a lance while tilting at a tourney with a young captain of his guard, and died in great pain ten days after.

The prediction of the death of Charles I, of England, and the great fire at London, in 1666, ran in this wise :

*“Le sang de juste a Londres sera faute
Brulez par feu de vingt et trois, les Six,
La Dame antique cherra de place haute
De meme secte plusieurs seront occis.”*

(The blood of the just shall be wanting in London,
Burnt by the fire of three and twenty the six.
The ancient dame shall fall from her high place,
Of the same sect many shall be killed.)

Another line appears more closely to point the fate of Charles :

“Le Senat de Londres mettront a mort le Roy.”

(The London Senate will put the King to death.)

Cromwell's success in Flanders is also alluded to :

“Le Oliver se plantera en terra firme.”

(Oliver will get a footing on the Continent.)

These prophecies, with many others of less import, were collated and published, and had many sincere believers long after; even to the latter part of the last century.

Political prophecies through the medium of almanacks grew so alarming, and possibly personal in their character, that Henry III, of France, forbade such to be inserted therein, which prohibition was repeated by Louis XIII as late as 1628. At a much earlier date every almanack was required to be stamped with the approval of the Bishop of the Diocese before publication.

No royal proclamation ever appeared against almanacks in England, as they were generally free from any direct allusion to state affairs. They were, however, under the supervision of the Archbishop of Canterbury and the Bishop of London.

The exclusive right for the publication of almanacks was granted by Elizabeth to two members of the Stationers' Company, which monopoly was extended by James I to the Universities at Oxford and Cambridge, and the Company of Stationers jointly; the Universities afterward commuting their rights so that the Stationers practically owned the franchise.

At an early day when Tenison was Archbishop, a near relative of his who was master of the Stationers' Company, thought it a compliment to call at the Episcopal residence at Lambeth in the Company's stately barge, on the Lord Mayor's Day, when the Archbishop sent out creature comforts in the shape of spiced wine, and cakes and ale to the attendants and watermen. This grew into a custom, the Stationers' Company acknowledging the hospitality by presenting to the Archbishop of Canterbury, copies of the several almanacks which they publish.

This ceremony of presentation is still continued, but does not possess the marine and free-lunch characteristics of the olden time.

Thomas Carnan published an almanack in opposition to the Stationers Company for three years, and was as many times imprisoned, but in 1775 the Court of Common Pleas decided in his favor, and terminated the existence of this monopoly which had continued 170 years.

Lord North, in 1779, brought in a bill to renew the Company's privilege, but through the efforts of Erskine in favor of the public the bill was rejected. The remarks of Erskine would bear evidence that the publications of the Stationers' Company in the almanack way were not the highest standard of morality. To quote him: "The worst part of Rochester is ladies' reading, compared with the filth these almanacks contain."

The defeated monopolists, however, still kept the trade by bribing their competitors, and by their influence over the book market.

To return to the golden period of this class of literature :

During the reign of James I, the *Philomaths*, (Lovers of Mathematics) the astrologers again came prominently to the front, even forming themselves into a corporation or society having their annual celebrations and dinners as did the various trade associations and guilds. Elias Ashmole, the antiquary, being prominent on these occasions.

The prosperity of the almanack-makers and their predictions brought to them however the attacks of their opponents.

A few years previous, Rabelais, himself the author of several almanacks, ridiculed the pretensions of the astrologers in his *Pantagruelian Prognostication*, entitled :

"The most certain, true, and infallible Pantagruelian Prognostication for the year that is to come, for ever and aye. Calculated for the benefit and nodification of the giddy-brained and weather-wise would-be's. By Master Alcofribas Nasier, architriclin to the aforementioned Pantagruel."

Following the example of this illustrious satirist, the wits of this period opened their satirical warfare against the "star-gazers," and the failure and extravagance of their predictions.

Dekker, the play-wright, was prominent in wielding the lash, publishing his "*Raven's Almanack*," in 1609, a plethora of mock prognostications and comic incidents.

This was followed by the "Owle's Almanack," a publication of similar import, by Lawrence Lisle, in 1618, a medley of ridiculous calculations in imitation of Dekker's work.

The astrologers were a little shaken by this system of lampooning, but still received no permanent injury. The company of stationers however were equal to the emergency, publishing thereafter for a period, two sorts of almanacks — one to suit the skeptics, and the other to tickle the palate of the credulous.

During the troublous times of Charles I and the Commonwealth, the astrological profession again revived and prognostications became more popular, increasing in number and repute; the most noted seers being the celebrated William Lilly and his compeers Booker, Backhouse and Gadbury.

William Lilly, the most successful of these charlatans deserves more than a passing notice. He flourished between the years 1602–1681; born 1 May, 1602; died 9 June, 1681, and was proficient in all the unscrupulous cunning, adroitness, and plausibility, which go to make up the successful quack and impostor. When Charles I was imprisoned at Carisbrooke Castle, Lilly was consulted for the hour which would favor his escape. He was satirized by Butler in *Hudibras* as Sidrophel.

"Do not our great reformers use
This Sidrophel to forebode news?
To write of victories next year,
And castles taken yet i' th' air?
Of battles fought at sea, and ships
Sunk two years hence? the last eclipse?
A total o'er throw given the King
In Cornwall, horse and foot, next spring?
And has not he point-blank foretold
Whats'e'er the close committee would?
Made Mars and Saturn for the cause,
The Moon for fundamental laws?
The Ram, the Bull, the Goat declare
Against the Book of Common Prayer?

Merlini Anglici Ephemeris :
OR,
Astrologicall Predictions for the Year, 1652.
By WILLIAM LILLY, Student in *Astrology*.
Deus dabit his quoque finem.



London, Printed for the Company of Stationers, and
H. Blunden at the Castle in Cornhill, 1652.

Portrait of
WILLIAM LILLY.
Title Page of his Almanack. 1652.



The Scorpion take the protestation,
And Bear engage for reformation?
Made all the royal stars recant,
Compound and take the covenant?"

Lilly was the author of an almanack entitled *Merlinus Anglicus Junior*, and continued its publication from 1644 until his decease, when he was succeeded by his student, Henry Coley.

Lilly published numerous other works among which were :

"A Prophecy of the White King and Dreadfull Dead-man Explained;" "Supernaturall Sightes and Apparitions seen in London, 1644, interpreted."

In his life, written by himself, he claims to have had conferences with angels, and further states that the voices of these, much resembled those of the Irish. This autobiography, published after his decease, is a remarkable record of credulity and successful imposture.

He was attached to the Parliamentary Cause, and made a large fortune by his art during the Commonwealth. After the Restoration he was imprisoned, but subsequently released and he returned to the country. After the great fire in London, 1666, he was again apprehended on suspicion of knowing something of its origin. As a summary of his character, a noted writer has said, "Lilly was an exquisite rogue, and never at fault."

The next almanack maker was John Partridge, b. 1644, d. 1714; a shoemaker by trade, acquired some knowledge of Latin, astronomy and astrology, and undertook the publication of an almanack. He was attacked by Swift who published a number of satirical and humorous pamphlets against the shoemaker-astrologer. Swift predicted the death of Partridge—"having consulted the star of his nativity, I find he will infallibly die on the 29th of March next (? 1708) about eleven at night of a raging fever; therefore I advise him to consider of it, and settle his affairs in time." After this date had transpired, Partridge publicly denied the predicted catastrophe. Swift followed with *An Elegy on the Supposed Death of Partridge the Almanack-Maker*, followed by

The Epitaph.

“ Here, five foot deep, lies on his back
A cobbler, star-monger and quack,
Who, to the stars, in pure good-will,
Does to his best look upward still.
Weep, all ye customers, that use
His pills, his almanacks, or shoes ;
And you that did your fortunes seek,
Step to his grave but once a week.
This earth which bears his body's print,
You'll find has so much virtue in't,
That I durst pawn my ears 't will tell
Whate'er concerns you full as well
In physic, stolen goods or love,
As he himself could when above.”

NOTE.—Partridge's memory is preserved in Pope's “Rape of the Lock.” After Belinda's curl has been appropriated, the poet places it among the constellations thus :

“ This the beaumonde shall from the Mall survey,
And hail with music its propitious ray ;
This the blest lover shall for Venus take,
And send up prayers from Rosamunda's lake ;
This Partridge soon shall view in cloudless skies,
When next he looks through Galileo's eyes ;
And hence the egregious wizard shall foredoom
The fate of Louis and the fall of Rome.”

Following Lilly and Partridge came the noted charlatan, Francis Moore, born at Bridgnorth, Salop, 29 January 1656–7, and who preyed upon the purses of the credulous in the latter part of the seventeenth, and the early portion of the eighteenth centuries, practicing as an astrologer, physician and schoolmaster. Moore prepared an almanack known as *Vox Stellarum*, or Moore's Almanack, for the Company of Stationers from about the year 1680.

It attained a great reputation, and its publication under the same title is continued to the present day.

In 1704 John Tipper, a schoolmaster at Coventry, established the *Ladies' Diary*, as a calendar and with the evident intent to introduce

the study of mathematics to the "gentle fair" as well as other "entertaining particulars peculiarly adapted for the use and diversion of the fair sex." It was not a success as long as "figures" were the chief topic, but when recipes for cookery and preserving were introduced to season, as it were, the mathematical problems presented in versified enigmas, the girls appeared to manifest a little more curiosity.

The "Gentleman's Diary" was brought out as a rival publication to the former in 1741, but one hundred years later, the discreet age having been arrived at, the proprietors concluded to marry them, and since 1841 the publication has been continued as the "Ladies' and Gentlemen's Diary."

A noted English maker of almanacks of the eighteenth century was Henry Andrews, who for forty-three years compiled the calculations for "Moore's Almanack" for the Company of Stationers. He was born February 4, 1744, at Frieston, near Grantham, and died at Royston Herts, January 26, 1820. From a very humble beginning he advanced to the attainment of a reputation second to none as an astronomer and mathematician.

1664.

The first humorous almanack, continued as an annual publication, was *Poor Robin*, 1664, which subjected the celestial science to contempt and ridicule. It was entitled

"An Almanack after a New Fashion, wherein the Reader may see (if he be not Blinde) many Remarkable Things worthy of Observation, containing a Two-fold Kalender, viz: The Julian or English, and the Roundheads or Fanatics, with their several Saints-Daies and Observations upon every Month."

"Written by Poor Robin, Knight of the Burnt Island, a well-wisher to the Mathematicks. Calculated for the Meridian of Saffron Walden, where the Pole is elevated 52 degrees and 6 minutes above the Horizon. Printed for the Company of Stationers."

January.

"Now blustering Boreas sends out of his quiver
Arrows of snow and hail, which makes men shiver;
And though we hate sects and their vile partakers,
Yet those who want fires must now turn Quakers."

Weather predictions:

January.

“There will be much frost and cold weather in *Greenland*.”

February.

“We may expect some showers of rain this month or the next, or the next after that, or else we shall have a very dry spring.”

This almanack was supposed to have been originated by the assistance of Robert Herrick, the poet. It was published continuously until 1828.

Before leaving the principal domain of the Astrological Almanack, a description of the “Houses” alluded to the therein, may be of interest.

The *Houses*, or *Heavenly Houses*, alluded to in the Astrological Almanacks, were formed by drawing great circles through the North and South points of the horizon, as the meridians pass through the poles, dividing the heavens, visible and invisible, into twelve equal parts—six above, and six below the horizon. These formed the “twelve houses,” and were numbered onward beginning with that which lay in the East immediately below the horizon.

The first house was the dominion of *Life*; the second, *Fortune*, or *Riches*; third, *Brethren*; fourth, *Relations*; fifth, *Children*; sixth, *Health*; seventh, *Marriage*; eighth, *Death*, or the upper portal; ninth, *Religion*; tenth, *Dignities*; eleventh, *Friends* or *Benefactors*; twelfth, *Enemies*, or *Captivity*.

The position of the “twelve houses” at the instant of an individual’s birth was the *theme* from which to “cast a nativity.”

The “houses” had different powers, the strongest being the first, and as it contained that portion of the heaven *about to rise*, it was called the *ascendant*, and the point of the Ecliptic cut by its upper boundary was the *horoscope*. Each “house” was governed by one of the heavenly bodies as its *lord* who was strongest in his own “house.”

THE ALMANACK IN AMERICA.

Before proceeding with the development of the weather in America, it may perhaps be interesting to briefly review the condition of the country before the introduction of the bulwark of our liberties.

The portion of America where the almanack first made its appearance was not the most inviting spot in the world for some years prior to that event, and had not improved much in general comfort for a considerable period thereafter. About forty years previous to the date we mention, the land was inhabited by a very simple-minded people, having but few necessities or desires which were supplied in a very satisfactory manner, as far as we can learn. The Anglo-Saxon civilizers—rum, gunpowder and tobacco, had not yet been introduced to their notice, and they had progressed but a little way in scientific investigations. Astronomy had but few charms for these children of nature—the stars were only of utility as guide-posts on pleasant evenings. Astrology had absolutely no development, and the “medicine man,” (as in modern times among us) held almost absolute domination of their minds and bodies. A happy condition of things, truly, this primitive state of the aboriginal man! But this is a world of change. One very wet, disagreeable afternoon the neighboring ocean was much agitated, and we are informed that the breaking waves dashed high on a coast which was not only rock-faced, but stern and forbidding. The trees were likewise agitated by the force of the wind, and all the surroundings were decidedly moist and unpleasant. On the said afternoon, which was in the month of December, a small vessel, the like of which had never been seen in that neighborhood before, and which conveyance bore a very unseasonable name made its (or her) appearance in close proximity to the residence of the aborigines mentioned above.

As soon as the weather had cleared up sufficiently to enable the contents of the vessel to be partially dried, the ancestors of Mr. Alden, of Akron, together with Miss Mary Chilton and parents; T. Tinker, Digerie Priest, a "man of war" named Miles Standish, a party by the suggestive name of Carver, Messrs. Winslow and Brewster, with quite a number in the "steerage," proceeded to disembark, taking with them with religious care the mirror now exhibited at the rooms of this Society.

It was not a jolly party—there was nothing in the surroundings to cause jollity—even if their bilious temperaments could have possibly been susceptible of jocosity, or anything akin to it. They had left "Merrie England" to find a place where they could be miserable according to the dictates of their own desires, the condition of their livers and other digestive organs. They went first to Holland, but even the stolid phlegmatic Hollander was too jolly to suit their peculiar notions, and so they chartered the "May Flower and Consort" for a voyage in search of unhappiness, and struck it on the inside of Cape Cod. Miss Chilton, who appeared the most frisky one of the party, went ashore in the first boat, and has the honor of being the first to set foot on the rocks which were henceforth to be dedicated to long-winded sermons and sickness, Psalms, suffering, and sadness for many a year.

The sturdy child of nature, whose domain was thus invaded, looked with amazement upon the peculiar customs of the late arrivals, and reciprocally, the latter were astounded at the apparent cheerful disposition of those who had never seen a white man before. The sample sent was not perhaps quite reassuring even to the untutored savage.

Do not imagine that the new-comers had nothing to lighten up their dreary sojourn in the wilderness. As an employment they endeavored to interest the children of the forest in the peculiar ideas and traditions which they had brought with them in the form of legends and literature. Failing in this, they possibly introduced the *agua vitae* form of persuasion, for you must know that this potent argument did then, as now, go hand in hand with the advance of civilization. The aborigines took kindly to the "medicine," but it did not shake their ancient faith, however it might have affected their locomotion. Subsequently rewards were offered, bounties were

proclaimed for Indian scalps, and it seemed then as though a more cheerful expression overspread the countenances of the Pilgrims, who were expert at managing the arquebus and caliver.

Two years after the arrival of the first consignment, a ray of cheerfulness appeared about to light up the social sky of New England. In 1622, that jovial limb of the law, Master Thomas Morton, arrived, and it would have seemed that his advent should have in a measure dispelled the gloom which had pervaded Plymouth society, but alas, how often our best intentions bring forth but Hesperian fruit. Thomas undertook a settlement in the neighborhood from which it was his intent that all bilious, sad-countenanced individuals should be forever banished. He succeeded for awhile—drove a thriving trade with the natives, bartered them powder and ball, conversation water, and muskets—opened a military school in which to teach the Indian idea how to shoot, and endeavored according to his peculiar notion to bring the savage to highest state of civilization by the shortest possible route. But Brother Morton's school was as much too far advanced as the "academy of sadness" at Plymouth was too antiquated, to bring about a fellow-feeling between the "salvages" and the new-comers. There arose however, quite providentially, a man who was equal to the occasion, and who took hold of the subject—which subject was Morton—in a manner calculated to definitely settle the difficulty. John Endicott, "the Puritan of Puritans," was conveniently at hand, and immediately proceeded through Mr. Morton and his arrangements. Captain Standish assisted also, and despite Mr. Morton's resistance, the banners of those who "were to pour sunshine over New England's rugged hills and scatter flower seeds throughout the soil," were trailed in the dust, the May pole was cast down, the pastimes of Merrie England were abolished, the name of Merry (Ma-re) Mount was obliterated; salt, for aught we know, was sown on the spot, afterward to be known as Mount Dagon. The sun of merriment and good cheer had set, and jaundice reigned supreme among a people where the whipping post, the stocks and the pillory were considered more congenial diversions.

To think of any sort of cheerful literature at this period would have been sheer folly. No one desired any addition to the stock which had already been brought, and the establishment of a press would have been regarded as the erection of an idol to divert the minds of the people from more serious matters.

These serious matters were evidently the experimenting in suspended animation by the occasional hanging of an obtrusive Quaker, the accelerated expedition of Roger Williams "for opinion's sake" to found his asylum of religious liberty at Rhode Island; the summary banishment of Anne Hutchinson and family to meet a barbarous death at the hands of Indians near Oost Dorp, in New Amsterdam, the bare intelligence of which caused a thrill of joy to permeate the breasts of her persecutors at Plymouth—while perhaps the event was celebrated by a burnt offering of a brace of superfluous aborigines.

But a change was coming—slowly perhaps—but none the less imminent. About twenty years after the first arrival, Harvard College was established at Cambridge, and almost coeval with this event an important factor in the civilization of the Western World, made its appearance. A printing press was set up at the College in 1639, and after the publication of a sheet entitled "The Freeman's Oath," the first book issued therefrom was "an *Almanack*, calculated for New England by Mr. Pierce, Mariner."

The press was managed by Stephen Daye, a native of London, England, who came to the Colony for that purpose. He relinquished the business in 1649, being succeeded by Samuel Green, of whose descendants to the present day there were printers in each generation. The first presses set up in nearly all the English Colonies were established in each by the descendants of Samuel Green, and the first production therefrom was almost invariably an almanack.

The almanack, therefore, is worthy of some consideration, as a part of the literary history of America, and though it has been oftener passed by unnoticed, a recent writer has deemed it worthy of the following merited and generous tribute:

"No one who would penetrate to the core of early American literature, and would read in it the secret history of the people in whose minds it took root, and from whose minds it grew, may by any means turn away in lofty literary scorn from the almanack—most despised, most prolific, most indispensable of books, which every man uses, and no man praises; the very quack, clown, pack-horse, and Pariah of modern literature; the supreme and only literary necessity even in households where the Bible and the newspaper are still undesired or unattainable luxuries."*

*History of American Literature.—Moses Coit Tyler.

In the Colonies these productions partook of much the same quality as those of the Mother Country, and their development progressed much in the same manner. In the beginning they consisted of the calendar merely, and perhaps references to coming eclipses. Later, they embodied astrological predictions—but very few of these prognostications were of a *judicial* nature, being mostly devoted to the weather. Subsequently, proverbs, jests, humorous tales, wise saws, historical sketches, medical essays, political tracts, and other information was added, so that in the course of time the unpretentious calendar of eight pages had increased to a pamphlet of forty-eight pages, at the commencement of the present century.

The collections of American almanacks in the various libraries form a very interesting history of the development of the art of printing, and the rude wood cuts in the earlier issues are in vivid contrast with the artistic creations of the illustrators of modern publications.

Hon. Amos Perry, Secretary and Librarian of the Rhode Island Historical Society, read a very interesting paper on almanacks before the Society in October, 1884, which embraces a description of such treasures deposited in the Library, with a short history of some of the issues in New England. This is the first pamphlet devoted to this subject exclusively that I have noticed, and I am pleased to quote his words concerning their general character.

“Almanacks served our forefather’s not only as calendars, but as compendiums or rather medleys of astronomy, astrology, geology, meteorology, biography, history, tradition and science. They contained the dates of notable marriages, births and deaths; of many remarkable events; of college commencements, election days, cattle shows, the sessions of courts; together with enigmas, problems, quaint sayings, tables of distances, and practical information and suggestions of various kinds: and they often served at the same time as diaries and account books. Sea captains noted in them important facts connected with their voyages, as the dates of their departure and arrival, vessels spoken on the passage, and various striking occurrences. Farmers made notes about their cattle, hogs, sheep and crops. Clergymen made minutes showing when and where, and on what subject they preached, and the complexion of their theology, as when the Rev. Ezra Stiles, D.D, wrote: “February 13th, 1789, Gen. Ethan Allen, of Vermont, died and went to Hell this day.” Invet-

erate chroniclers like Theodore Foster made their almanacks historical note-books and literary curiosities for the instruction and amusement of succeeding generations.

The earlier almanacks issued after the establishment of the press at Cambridge were the productions of eminent men and scholars, quite all of whom were graduates or undergraduates of Harvard and other New England colleges. Many of these individuals only appended their initials to their works, but among those less modest may be noted the names of Danforth, Oakes, Cheever, Chauncey, Brigden, Flint, Dudley, Holyoke, Clough, Sherman, Brattle, and even the celebrated Mather family, in the persons of Cotton and Nathaniel, found time among their other literary duties to rejoice the world with an occasional *Ephemeris*.

Mr. Foster was a poet-astronomer, and his issue of 1675, commenting upon the massacre of Indians at Canonicus Fort, he says :

“’Tis feared a thousand natives young and old
Went to a place in their opinion cold.”

After 1702 the authors of Almanacks became more numerous. Many individuals were engaged in the study of the heavens and furnished the results of their investigations, either astronomically or astrologically, over their signatures, to which was appended the title, *Philomath*, or *Philomathemat*. Also, *Lovers of Astronomy*, *Students in Astronomy*, *Physike*, and *the Mathematicks*. These were active competitors for public favor. Woe to the “star-gazer” who now made an error in his “mathematicks,” or “prognostications!” His ready rival in his next annual production made liberal use of printers’ ink to show up the unfortunate error, and vaunt his own superiority in the “world of figures.”

Between the years 1681 and his decease in 1702, the “ingenious Mr. John Tulley” published an almanack. So superior was his education to his contemporaries in America, and so superstitious and ignorant were the common people, that with them he had the reputation of a conjurer, which repute at this day would only be regarded as common sagacity.

In 1686 he appears to have driven all competitors out of the field—perhaps by reason of his poetry, which, though possibly highly entertaining at that period, would be laid on the top shelf now-a-days.

There were, however, rival publications—one entitled the “Harvard Ephemeris,” possibly the production of some ambitious undergraduate, besides a remarkable instance of juvenile precocity in the shape of “An Almanack for 1695,” by Increase Gatchell, *æt* 16.

About three years prior to the decease of Mr. Tulley, or in the year 1700, Mr. Samuel Clough successfully conducted an almanack until his demise in 1708, which publication was chiefly remarkable for the extreme freedom of the poetical effusions therein.

In the year 1685 appeared the first almanack published in the Colony of Pennsylvania, entitled “*Kalendarium Pennsylvaniense* for 1686, by Samuel Atkins, printed by William Bradford, at Philadelphia.” This was followed by numerous other similar publications, notably those of Daniel and Titan Leeds, and Christopher Sower and his descendants, who issued almanacks continuously at Germantown, 1738–1778.

In 1697, J. Clapp published the first almanack issued in the Colony of New York.

N. Whittemore, a pertinacious squabblor commenced his “Diary” in 1705, continued it until 1729, when it was discontinued, to be revived again in 1738 to be only consigned to the memories of the past, some two years later.

Daniel Travis issued an almanack from 1707–1723, printed both at New York and various places in New England.

From about the commencement of the eighteenth century, it would appear that the censorship of the Colonial Governors who had the supervision of the public prints had been removed, as the *Imprimatur*, accompanied by the signature of either the Governor or Secretary, no longer appeared on the almanacks.

Consequently the freedom of the press being established, everybody who had the inclination “rushed into print,” and the almanack manufacturers increased and multiplied throughout the land. Authors and odd titles were numerous: Poor Joseph, 1759; Poor Will, 1770, Philadelphia; Poor Tom, 1759, N. Y.; Poor Job, 1750, Newport, R. I.; Poor Roger, 1762, N. Y.; Poor Thomas, 1763, N. Y., and the monarch of all the “Poor” almanacks, “Poor Richard,” from the press, and under the authorship of Benjamin Franklin, appeared at Philadelphia, 1733, and was continued until as late as 1767.

Examples of this almanack now command fabulous prices both in England and America.

“This almanack was remarkable for the numerous and valuable concise maxims which it contained, all tending to exhort to industry and frugality. All the maxims were collected in an address, entitled ‘The Way to Wealth.’ This has been translated into various languages, and inserted in different publications. This address contained, perhaps, the best practical system of economy that ever has appeared. It was written in a manner intelligible to every one, and which could not fail of convincing every reader of the justice and propriety of the remarks and advice which it contains. The demand for this almanack was so great that ten thousand have been sold in one year; which must be considered as a very large number, especially when we reflect that this country was, at that time, but thinly peopled. It cannot be doubted that the salutary maxims contained in these almanacks must have made a favorable impression upon many of the readers of them.”

Contemporary with these appeared “Abraham Weatherwise,” at Philadelphia, 1762; Father Abraham, New York, 1759; Copernicus Weatherguesser, New York, 1767; together with “Dutch,” Philadelphia, 1737-50; “Quaker,” Philadelphia, 1737-8; “American,” New York, 1742; “High Dutch,” 1749; “English,” 1750; and many others of varied titles and authorship.

R. Saunders published in Philadelphia from Franklin’s press from 1743 to late in the century.

Roger Sherman, of Connecticut, published his “Diary,” 1750-1760.

Hutchins celebrated New York almanack, was commenced by John Nathan Hutchins in 1759, and continued many years.

The first almanack in Rhode Island was “Poor Robin,” issued by James Franklin (an elder brother of Benjamin), at Newport, in 1728, which was continued until 1735, and appeared again at Philadelphia, 1742.

Benjamin West was the author of the first almanack printed at Providence in 1763. West was also the author of the “Bickerstaff” Almanacks which appeared at Boston and other New England cities in 1768, and for a number of years thereafter. He was a noted astronomer and mathematician. South Carolina had almanacks pub-

lished by George Andrews, 1760-3. Delaware's first almanack was issued by one Fox, at Wilmington, 1762, and continued for several years; and the first almanack issued in Maryland was printed in 1763 at Annapolis, by a descendant of Samuel Green, of Cambridge, Mass., and the great-grandfather of the late Frederick W. Green, of this city, formerly associated with W. W. Armstrong in the publication of the *Plain Dealer*.

Nathaniel Low commenced his almanack 1762 (none issued in 1766), and the same was continued until early in the present century.

In the year 1726 appeared the most celebrated almanack ever published in America. It was compiled by Nathaniel Ames, a physician and inn-keeper at Dedham, Mass., and issued under the title of "An Astronomical Diary and Almanack." Its author was "a man of evident original, vigorous and pungent genius," and his publications appeared annually until his decease in July, 1764.

The following sketch of his ancestry and prosperity is copied from the *New England Historical and Genealogical Register* :

NATHANIEL AMES, of Dedham, born in Bridgewater, Mass., 1708, was a great-great-grandson of Richard Ames, of Bruton, Somersetshire, England, great-grandson of William Ames, born at Bruton, 6th October, 1605, and who settled at Braintree as early as 1640, grandson of John (eldest son of William) who was born 24th March, 1647, and moved to West Bridgewater about 1672, and son of Nathaniel (second son of John) who was born October 9, 1677.

Nathaniel, the subject of this sketch, was a distinguished physician and mathematician who removed to Dedham and married, in 1735, Mary, daughter of Joshua Fisher, by whom he had a son, Fisher Ames, who died in infancy, but subsequent to his mother's decease, after which a lawsuit took place in which it was decided for the first time that the estate ascended to the father as next of kin to his son, by the Province law, contrary to the English common law.

Dr. Ames married in 1740 a second wife, Deborah, daughter of Jeremiah Fisher, by whom he had: 1. *Nathaniel*, born, 1741; graduated at Harvard, 1761; was a physician; died at Dedham, in 1822, leaving no children. 2. *Seth*, graduated at Harvard, 1764; also a physician, who died at Dedham, 1778. 3. *Fisher*, one of the most brilliant men ever produced in this country; born, April 9, 1758; entered Harvard College at twelve years, and graduated 1774. He died July 4, 1808, aged 50 years and was interred at Dedham. 4. *Deborah*. 5. *William*.



In his comments on the literary ability of Doctor Ames, Mr. Moses Coit Tyler, in his "History of American Literature," remarks that Ames' almanack "was the most popular publication of its kind in New England, reaching the then enormous circulation of 60,000 copies.

In those days of no copyright law, copies were surreptitiously obtained, and quarrels and bickerings among printer's, relative to the "genuine Ames' Almanack," were of frequent occurrence, and occasionally the Doctor himself certified by card to the "correct edition."

Ames' Almanack was regarded as better than Franklin's,* and was probably the most pleasing representative we have of a form of literature that furnished so much entertainment to our ancestors, and that preserves for us so many characteristic tints of their life and thought.

Nathaniel Ames made his "Almanack" a sort of annual cyclopedia of information, of amusement, —a vehicle for the conveyance to the public of all sorts of knowledge and nonsense, in prose and verse, from literature, history, and his own mind; all presented with brevity, variety, and infallible tact. He had the instinct of a journalist; and under a guise that was half frolicsome, the sincerity and benignant passion of a public educator. He carried into the furthest wildernesses of New England some of the best English literature, pronouncing there, perhaps for the first time, the names of Addison, Thomson, Pope, Dryden, Butler, Milton. The pages were prolific with fact and frolic; the wisdom of the preacher without his solemnity, terse sayings, shrewdness, wit, homely wisdom, all sparkling in piquant phrase.

As the public expected the almanack maker to be a prophet, Nathaniel Ames gratified the public; and he freely predicted future events, but always with a merry twinkle in his eye, and always ready to laugh the loudest at his own failure to predict them aright. He mixes, in delightful juxtaposition, absurd prognostications, curt jests, and aphorisms of profound wisdom, the whole forming a miscellany even now extremely readable, and sure, at that time, to raise shouts

*A French encyclopedist declares that Franklin "put forth the first popular almanack which spoke the language of reason," but Franklin borrowed much of the wisdom and wit which he introduced into his almanacks from Bacon, Rabelais, Rochefoucauld, Steele, Swift, DeFoe, and others.

of laughter around thousands of fire-places where food for laughter was much needed, the author wearing the mask of jester only to hide a most earnest and friendly face."

Nathan Daboll, the celebrated mathematician, commenced the publication of an almanack at New London, Conn., in 1773. It was intended in the earlier years for the especial service of seafaring men, but was adapted to the use of "landsmen" as well, and grew into great popularity in Connecticut. The publication of this almanack has continued from the time of its first appearance in 1773 until the present year—still being known as "Daboll's Almanac," the calculations being made by a descendant of the original "Nathan."

The "Thomas" almanacs were (and are yet) very popular in New England, especially in Massachusetts. Of the "Thomas" publications there were two: One issued by Isaiah Thomas, about 1774, was continued by his son, Isaiah, Jr., until early in the present century; the other "Thomas" almanack was published by Robert B. Thomas, the first issue being made in 1793, and continued until his decease, after which the almanack appeared under the title of "Thomas' Almanack," and its publication is still continued.

This concludes the list of the more important almanacks issued in America prior to the year 1800.

Beyond the publications continued to the present time and herein mentioned, there are few, if any, notable examples of almanack literature published in the present century which may deserve any special mention, unless we except the Anti-Masonic Almanack, which was published at the time of the alleged martyrdom of Capt. William Morgan, whose alleged taking off furnished such budding political capital during the period 1828-31.

Following this came the Davy Crockett Almanack, illustrated with the daring deeds, both imaginary and actual, performed by this typical frontiersman. To this succeeded the Rough and Ready Almanack, replete with illustrations of the Mexican war, and exalting the candidacy of Zachary Taylor for the Presidency, not to mention "Funny Elton's Comic Almanack," and a score of others that furnished both information and amusement to those of a generation ago.

The almanack published from 1848 to 1880 by George Beckwith, of New Haven, Conn., had a large local circulation and celebrity, due largely to the eccentricity and remarkable intellectual attainments of its author.

With the march of empire westward, the almanack does not appear as a very important item of literature among the settlers of the great West.

Its home in America, and the seat of its greatest popularity appears to have been in the original thirteen colonies, notably the New England and Middle States, and those who emigrated toward the setting sun depended largely upon the production of the eastern presses for their weather forecasts, humor, and religious intelligence. Even at the present day numbers of families in our own State, notably those descended from Pennsylvania stock, would as soon be without a necessary farming implement as not to be possessed of a "Lancaster Almanack." The production of almanacks at an early day in our own State was quite limited, and our library is notably deficient in examples.

The earliest Ohio almanack we possess is "The Western Reserve Magazine Almanack," for 1816, by John Armstrong, teacher of mathematics, and published by James White & Co., at Warren, O. This contains, among other items, a chronological account of principal events in the life of Bonaparte, a chronology of the settlement and important incidents in the earlier history of America. United States Navy List for 1815, a period when we had some pride in our navy and its achievements. The Army Register with Andrew Jackson as Major General Commanding the division in the South, and Winfield Scott, Brigadier General in the same department. A graphic account of Pittsburg as the "Birmingham of America." A Moral and Physical Thermometer, wherein, under the head of Temperance, Cider and Perry, Wine, Porter and Strong Beer are recommended for Cheerfulness, Strength and Nourishment, concluding with a Biographical Sketch of General Zebulon M. Pike. In 1818 first appeared the Columbus Magazine Almanac by William Lusk, a very creditable publication. The larger portion is devoted to a description of the Solar System, the financial condition of the United States, and the Ohio *ad valorem* system of taxation.

At Cleaveland was published in 1831 the "Western Almanack," by Henry Bolles, a publication much the same as the above-named productions, but the miscellaneous articles mostly on the subject of Total Abstinence. Another Cleveland Almanack for 1833 contains the Ohio census for 1830, in which our city is exceeded in popula-

tion by Hamilton, Urbana, Springfield, New Lisbon, Lancaster, Columbus, Steubenville, Dayton, Zanesville, Circleville, Chillicothe, Portsmouth, Canton, Lebanon and Marietta. The Ohio Canal had been in operation but a few years, and was looked forward to for a general impetus in the growth of the State. An article on the subject remarks: "It is not a little singular that the canal fever has had such a general run, but it is subsiding, and the railroad pulse beats audibly." In 1836 the "Ohio Anti Slavery Society" published at Cincinnati the "American Anti-Slavery Almanack." The copy in the library (1841) is especially devoted to the cause of abolition; the advancement of the interests of the candidacy of James G. Birney, of New York, and Thomas Earle, of Pennsylvania, for President and Vice President of the United States; concluding with a "Ecclesiastical Roll of Infamy," which listed the names of Methodist clergymen who denied the competency of negro testimony at law, and a "Congressional Roll of Infamy," naming northern representatives, who supported the bill denying the reception of petitions for the abolition of slavery in the District of Columbia.

This closes the enumeration of the almanacs in the possession of the Society.

With the flood of literature of other classes which for the past twenty years has issued from the press, the almanack has been almost totally eclipsed and lost sight of except as an advertising medium, and we would especially ask those who may possess collections or single copies of these relics of the early days, to deposit them in the Library of the Society for the edification of future generations.

“I will conclude All in those pithy Verses of that worthy Gentleman, *Capt. George Wharton*,* which Verses I find often made use of by brutish Plagiaries, without once mentioning of that Learned Persons Name, viz :

*Mend, (Gentle Reader) what escapes amiss,
And then it matters not whose Fault it is ;
For, all men sin, since Adam first Transgrest :
The Printer sins ; I sin much like the rest :
Yet here our Comfort is, though both Offend,
We to our Faults can quickly put—*

AN END.”

Calendarium Astrologicum, Thomas Trigge, Gent. 1677.

*Capt. George Wharton, “Student in Astronomy,” author of “HEMEROSCOPEION,” 1652.

WESTERN RESERVE HISTORICAL SOCIETY,
TRACT 70.

The Pre-Glacial Course of Rocky River, O.

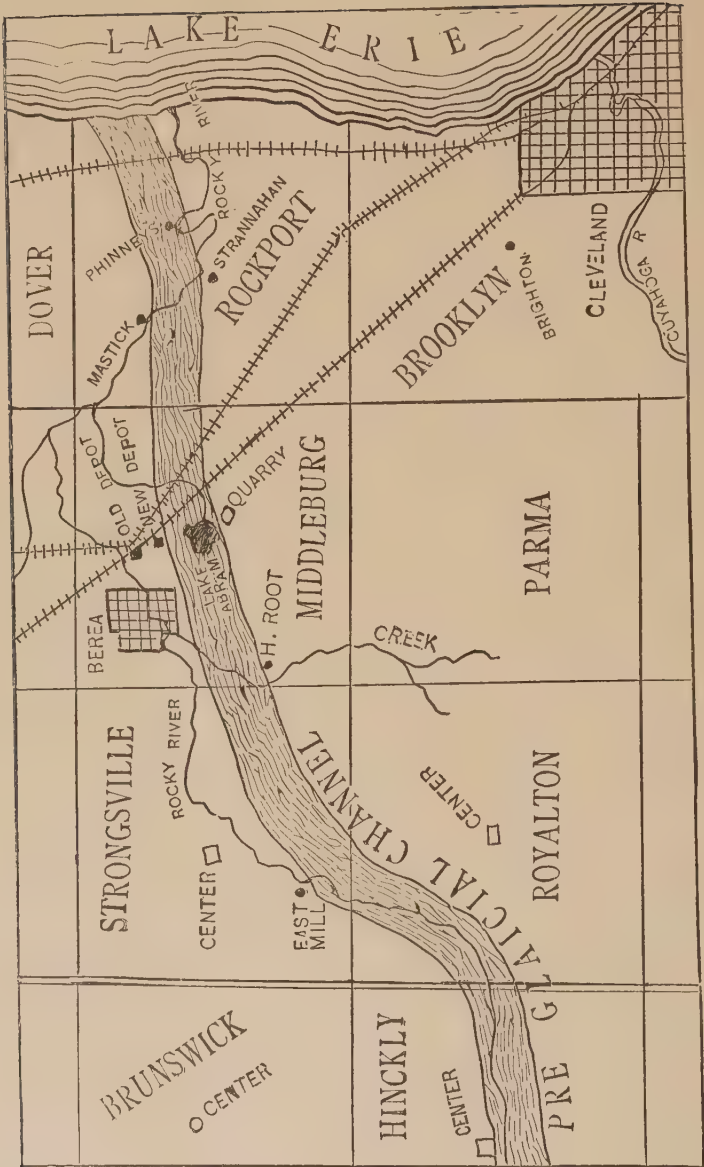
Read Before the Society February 6, 1886, by

DR. D. T. GOULD,

OF BEREА, OHIO.

That Rocky River had a pre-glacial channel was well known, and is referred to several times in our State Geological Survey, but no farther than to trace it back from Lake Erie, perhaps two miles, to a point where the present Rocky River has worn into one side of the ancient channel to a depth of about 80 feet. This is near Mr. Phinney's; here one bank of the river is shale for its whole height, the other sometimes clay, called "boulder clay" or "till." Here the survey leaves it, conveying the impression that from this point back into the country, the present river is simply re-occupying its old channel.

The writer has for many years been a resident of Berea, or its immediate vicinity, and latterly owner and occupier of a small farm about one and one half miles northeast of the village. Several facts relating to that immediate section surprised me. First was the chain of swamps divided by ridges; then the blue, pebbly, sticky mud found everywhere a short distance below the surface, and varying in hardness, from that which could scarcely be loosened with a pick, to quicksand of sufficient depth to mire an ox. I began in earnest to investigate the subject, when it was conclusively proven that there was no Berea grit or even shale under the farm.



In the winter of 1884 it first dawned on the writer that it might be a pre-glacial water course, and at the earliest possible moment in the spring, investigation was begun, and as it chanced nearly midway of the old channel. From here it was developed both north and south; the work on its northern extension, being at first an endeavor to trace its course toward the Cuyahoga river.

Extending along the whole eastern border of this village, and distant from it about one mile, is a chain of what were at one time seven swamps and small shallow ponds. These have within a few years been drained, cleared and brought under cultivation, and to-day are the somewhat famous onion fields of Berea. The divisons in each case are ridges of clay loam, of different heights, some not being more than ten feet, and others twenty, thirty, and in one case nearly forty feet high. The general direction of this chain of swamps is nearly north and south; the direction of the dividing ridges is *northeast to southwest*. The soil along the crest of these ridges is very noticeably sandy, while the general country everywhere, east and west of them, has a stiff clay soil.

With the exception of one swamp, the drainage is from one to the other, through gaps in these ridges which have been broken through by the contained water in each, into a general reservoir near the center of a swamp much larger than all the others combined. This reservoir or pond is "Lake Abram," and the reclaimed marsh around this pond, and also the detached marshes, constitute the Berea onion districts. This chain of marshes is two and one half miles in length. Northeast of this pond about one-half mile is a sandstone ledge, the northern margin of the Berea grit. The northern margin of the grit extends east, then northeast in an unbroken front, until it crosses the old Cleveland and Wooster pike a short distance south of Brighton Village, this village being near the bank of the Cuyahoga river.

Beginning again at our starting point, viz., the ledge northeast of the pond, and coming west across the swamp, the northern margin of the grit crops out about 40 rods north of the old depot at Berea, and a short distance farther west the east branch of Rocky River breaks through it into the Bedford and Cleveland shale below. From this point the grit keeps an almost due west course to the west branch of Rocky River and north of the village of Olmstead Falls, where the river has also worn for itself a channel through the grit to the underlying shales.

Between the old depot and the ledge northeast of Lake Abram, grit has been found at the new depot at a depth of about 33 feet, but only a few feet in thickness, immediately below which was found Bedford shale, but as we approach the swamp from the new depot, going easterly, no grit has been found in any of the wells dug, though one was put down to a depth of 35 feet on the margin of the swamp, and but little above its level, which level is here probably 25 feet lower than at the new depot. The material passed through was a stiff blue clay containing fragments of many kinds of rocks, with layers of quicksand interspersed. About one-fourth of a mile still further east and on the other margin of the swamp, a gas well has just been drilled which passed through over 60 feet of blue clay and quicksand before shale was struck, the surface here being but a few feet above the water in the pond; and one-fourth of a mile still further east and within 60 rods of the ledge of rocks above mentioned, another gas well has been put down, and here shale was found under 32 feet of clay and quicksand. The summit of the ledge is probably 40 feet above the level of the water in the pond. At the old depot, some over two miles south-westerly from this ledge, the grit at its highest point, where Rocky river cuts through it, has nearly the same elevation. Here we have two points where the grit comes to the surface, and between such points, as we approach the center from either side, the grit thins out from above and disappears, the shale also sags down until at the lowest point yet

found, namely, 60 feet, it is 100 feet below the summit of the ledge east of the pond. In place of the rock or shale is blue clay while outside of these two points the grit maintains its proper height, and an unbroken front from near Brighton to Olmstead Falls.

The ledge east of the pond extends in a southerly direction in a line nearly corresponding with the general axis of the whole chain of swamps for a distance of nearly a mile, but with a gradual descent. From its last point of appearance the grit can still be traced, though by a circuitous route, in a continuous line until it is overlaid by the Cuyahoga shale, which extends to the foot of Royalton hill, a distance of about five miles. The hill is composed of Cuyahoga shale, which here, and at other points of similar elevation, is shelly sandstone near the base, and this sandstone as we ascend changes to an impure limestone—the sub-carboniferous limestone of the State Geological Survey. In some of its strata this limestone is literally filled with fossils.

Going back now to the old depot west of the pond, Rocky river has cut through the grit, giving a perpendicular exposure in one place of nearly 50 feet. From the old depot south to the village of Berca, one mile distant, the river has worn its channel through solid sandstone, and from the village still further south the river has made a channel through undisturbed Cuyahoga shale, and runs on a shale bed for at least five miles, to a point near East Mills in Strongsville township, where two small loops of the river have a clay bed. Where these loops extend easterly the bed is clay, where westerly it is shale; until as we ascend to a point near Royalton line and well up to the south line of Strongsville township, the river leaves the shale and runs wholly on clay through the southwest corner of Royalton, and almost due south through Hinckley township, well over to its eastern side.

We have now one unbroken line of grit or shale on each side of a given strip of country for a distance of nearly eight miles. This brings us to East Mills, Strongsville township.

From East Mills south, Rocky river traverses a valley whose width approximates five miles from summit to summit. The bluff on the east side of the river at its highest point being about 200 feet above the water. On the west side of the river the elevation is not quite so much. The east bluff also along its whole line through Royalton, the northeast corner of Hinckley and Richfield townships may be described as steep, while on the west side through Strongsville and Hinckley townships, except just at Hinckley Center, the slope is in most places moderate. This valley is cut through undisturbed strata, the sub-carboniferous limestone in Royalton, with the addition of conglomerate in Hinckley. The width of the bottom of this valley will average $1\frac{1}{2}$ miles.

Thus we have in addition to the eight miles of continuous rock or shale mentioned above, about seven more miles, making altogether fifteen miles from our two starting points. The strip of country bounded by these two lines, extending southward for nearly fifteen miles, is of varying width but will average about $1\frac{1}{2}$ miles. With continuous strata of grit or shale on each of these lines, might we not expect to find the same grit or shale throughout the whole extent and width of this strip, or at least where intersecting ravines, creeks or rivers give us views of sections ten, twenty or thirty feet in depth? And more especially if outside of this strip, the grit or shale is at no place more than ten feet below the surface and at most but three or five? Now the fact is that throughout this whole strip, about 15 miles in length by 1 or $1\frac{1}{2}$ in width, no undisturbed grit or shale has been found at any place except at many feet below what it can be found outside this strip, but in its place we have the "boulder clay" or till; this can be found a few feet from the surface over the whole extent of the tract, and in many places within a few inches. Some of the places where wells have been dug, or sections made by creeks or rivers will now be mentioned to prove this statement. The well at the northwest corner of the main swamp has been mentioned. This was put down over 30 feet below the surface of the

pond, which made it over 70 feet below the summit of the ledge east of the pond. The gas well one-fourth mile east of the shale was found at 60 feet, and also the gas well still nearer the ledge east of the pond, with the shale under 32 feet of clay. One mile south from this, near the back line of the writer's farm, here a well was put down over 62 feet below the level of the pond—if to this we add the height of the ledge, 40 feet, we have 100 feet and no rock or shale, only the "boulder clay" with many layers of quicksand, so many in fact that the well had to be abandoned. At numerous points the exact spots of demarkation between shale and "till" can be found. The small creek which traverses this village runs on a shale bed. On ascending the stream from the village the shale suddenly ceases in the bed of the stream at a point just south of land owned by Samuel Root. From this point the bed of the creek is clay through every foot of its course until it reaches a point nearly due east. Here on land owned by Harry Root, and south of his house, the creek suddenly leaves the clay and cuts through solid shale. The banks of the creek between these two points are in some places 25 feet high and give fine views of the blue clay filled with scratched and broken stones, while outside these two points the banks are of about the same height, but composed of solid shale, capped with yellow clay 3 to 5 feet in depth. Further south from these points the eastern side of this mile or more wide strip of clay is shale, capped at the highest points by Cauda Galla grit, but covered in most places with overlying clays to a considerable depth. On the west side, the points of contact between shale and clay are on the farm of Mr. Walter Ashley, about 50 rods east of the old turnpike, and at a point but a few rods from where the present Rocky river has at one time run; a short distance further southeast, on the same farm, where a small ravine opens to the east; and in the ravine northeast of Porter Lyman's house, almost under the east line fence. These last two places named are in Strongsville. Again, at the East Mills, in Strongsville, the small loop of Rocky river on land

formerly owned by Honorable G. A. Hubbard, has a clay bed. This is the first place south of Berea where the river leaves its bed of shale and runs on clay. The clay continues but for a few rods and can be seen under the bridge just east of the grist mill; further up the stream the river has swung off to the west so far that it leaves the clay and takes up the shale. A little further up, the river bends again to the east, and here is clay. This is a longer loop, but a bend to the west brings it back shortly to shale. In this bend the banks of shale are 25 feet high. Finally when well over to the east line of Strongsville township, the river gets back on to the clay and remains through Royalton and Hinckley. Along the western side of this strip of clay every ravine and gorge coming down from the country cuts through solid shale or sandstone. The eastern side of the strip of clay has no cuttings by streams of sufficient depth to show its base. The clay on that side is piled up as a ridge, the apex looking southerly up the valley.

Throughout this strip of "till" which has been bounded are many springs; every ravine has them in greater or less abundance. These springs were sure guides in locating and developing this work. Any ravine with evidence of springs was conclusive proof of surrounding "till," and the reverse was also true, a spring in a shale-banked ravine being very unusual. Wells dug in this strip of "till" supply abundance of water at shallow depths. As a matter of fact this water supply has given character to the farms and also to the farmers.

Rocky river, from the old depot north towards Lake Erie, as was well known, ran on a shale-bed with high banks of the same over every rod of its course for several miles, the supposition being to where the State survey says the old channel comes into it about two miles south of Lake Erie; the remaining channel through all its course back into the country being like the Cuyahoga, the old channel re-occupied. Having this understanding it was considered out of the question to endeavor to connect the two pre-glacial channels,

as mine was already so much deeper than Rocky river that a union was not to be thought of. So this channel of mine must of necessity swing off to the northeast and connect with the Cuyahoga in the vicinity of Brighton. It took some time and considerable work to show the fallacy of this plan—my newly discovered channel could not be traced in that direction.

A trip was then made to the point on Rocky river where the survey says the channel coming up from Lake Erie connects with the present river. This point is near Phinney's. Here Rocky river was found to have only cut into the east side of the pre-glacial channel, not far enough but that the river was running on a shale bed; the clay, however, came down to within a few feet of the stream. This certainly was not the place where the old and new channels made their complete connection. But about a mile further south near the Stranahan hill and bridge, the present Rocky river cuts completely *across* the ancient channel. Going down stream, or towards Lake Erie, the pre-glacial channel is first entered about one-half mile below the old Mastick homestead in Rockport township, the summits of the bluffs being the first evidence of the change. Further down, the bed of the stream changes from Erie shale in great slabs, which give the river the appearance of being paved, to clay, the transition taking place within the limits of a few rods, and the wash banks are also clay now for their whole height. The river keeps in this clay through all its windings to the Stranahan bridge before mentioned; a little above which the bed of the stream changes from blue clay to Erie shale, and the bank at this point, which is about 80 feet high and nearly perpendicular, is composed from the top to the water's edge of clay. Going on down stream a short distance shale shows at the water edge; a little further down and still nearer the bridge the shale rises higher, and so on, until where the road goes up the hill on the west side of the river the shale has a height of perhaps 20 feet, while across the river (the river here making a sudden turn to the north)

shale forms the whole bluff, which is at least 80 feet high. The rising of the shale from the water's edge to the summit of the bluff is regular and uniform, at least to where the road goes up the hill, and without doubt the remainder would have shown it, but it has been removed by the river. The stratification of the shale is horizontal, and contains many thin bands of sandstone, but without regard to the resisting powers of the shale, it has been rubbed or planed down to a uniform pitch or angle which perhaps is 10°

It is at this point that Prof. G. F. Wright, of Oberlin, took some photographic views; also one a little further down the river, to show the height of the shale bank, to compare it with the bank composed of clay. Where the clay is in contact with the undisturbed shale it is filled with an inextricable mass of broken fragments of the same shale and sandstone on which it rests. A little above or over this mass the clay contains fragments of limestone, also quartz, granite and metamorphic rocks from across Lake Erie, rounded and scratched, the whole imbedded in the pasty material furnished by the Erie shale. So far as I have observed, the broken stones in the clay which lie immediately on the shale, although loosened and forced out of position, are not worn or rounded, but are as though a giant plow had torn them up and mixed them with the blue clay.

At the same point, viz.: Stranahan hill, one of the lake ridges crosses over the top of our old channel; it is here named Coe Ridge. On this ridge, and nearly over the center of the old channel, was the residence of the Hon. L. A. Palmer. If the estimate of Prof. Newberry is correct, at this place it is nearly 300 feet down through solid blue clay to the shale.

Sections of this old channel, at the lake shore, at Phinney's, and at this point, show the same angle at which the shale on each side of the ancient water course has been left by erosion which is probably about 10° . No existing water course in my observation is to be compared to this pre-glacial one. The channel of the present Rocky river has nearly perpendicular banks, and this is true of every other stream travers-

ing material as hard as this shale or sandstone. And so had this ancient stream in all probability. Its banks must have been at least 300 feet in height, from this point to Lake Erie, and very likely in some places nearly vertical.

From Lake Erie back to Phinney's the Geological Survey has already located it, and yet the surface of the ground where it is thus located has nothing to indicate the existence underneath of 300 feet of blue clay, in place of the Erie shale, which is on all sides of it and only thinly covered with soil. The country hereabouts is flat, the only exception being the Lake Ridges, and it is the river gorge which gives us the only views to be had of the old channel. In fact from Lake Erie back to the margin of the Berea Grit, a distance of seven miles, the whole country is a plain, with just enough rise to carry the underlying clay well up to the summit of the grit, seemingly a result of the ice sheet riding up and over its hard and resisting edge. The result of this is to gradually increase the depth of the underlying clay over the whole area, until we find it near the edge of the grit, ten, twenty, thirty, or even more feet in depth. All this serves me to mark our old channel, but a careful investigation of the territory from where the old channel finally leaves the present Rocky river, which is about one mile south of the Stranahan bridge, to our first starting point which is the rocky ledge just east of the little pond called Lake Abram, and the old depot, has enabled me to locate it with great certainty.

The process by which this part of the pre-glacial channel was reasoned out, so to speak, would be too tedious to detail—at some points the only means was by showing where it was not.

We have now joined together the three sections of our old channel. The first is from the little pond called Lake Abram, south to a few miles beyond the county line; this section we connect with the section between Lake Abram and Phinney's, and these two with the part spoken of by the Geological Survey from Phinney's to Lake Erie. Our old

channel has thus been pushed back from Lake Erie, south a distance of nearly 25 miles, passing through five townships, the first four spanning the whole width of Cuyahoga county, the fifth or Hinckley being in Medina county. And yet it has not been traced to its starting point. This has been reserved for a more convenient season. Its course beyond Hinckley is simply a matter of conjecture, but it will probably lose its identity in some of the swamps which are found west of Akron on the water-shed between Lake Erie and the Ohio river.

In my investigation I have been assisted by John Baldwin, Jr., of Berea, who in addition to advice has heartily seconded it by personal work in the field. Prof. G. F. Wright, of Oberlin, also has my thanks. A day with him and his camera at Stranahan Hill is gratefully remembered.*

*NOTE.—Since this paper was prepared a gas well has been drilled in this ancient water course nearly one mile south of the northern margin of the Berea Grit, and nearly midway of the surface channel. The drill passed through one hundred and ninety-two feet of alternate layers of blue clay and quicksand before reaching the black Cleveland shales. The red Bedford shale and Berea grit had been wholly removed.

WESTERN RESERVE HISTORICAL SOCIETY.

TRACT 71.

FIRST UNITED STATES LAND SURVEYS, 1786.
SEVEN RANGES IN OHIO.
THOMAS HUTCHINS, GEOGRAPHER.

By COL. CHARLES WHITTLESEY.

In May, 1785, the Congress of the old Confederation passed an ordinance providing, for the first time, for the survey of the public lands of the United States.

Thomas Hutchins was then geographer of the United States, an office to which he was appointed in 1778-9, during the Revolutionary war. It was then principally military; but in 1786 embraced the duties of Surveyor-General of the public lands. See tract No. 22 of our Series, 1874. The first surveys were to commence on the Ohio river, where the west boundary of Pennsylvania crosses it.

Hutchins had been the engineer to Colonel Bouquet's expedition against the Western Indians of 1764, more than 20 years previous, and had then conceived an original plan for the survey of new territories, which he was now enabled to put in practice for the first time. It is so superior to any of the previous modes in any part of the earth, that it has been followed substantially in the public surveys of this country to this day. As a base line Hutchins ran due west from the Ohio at the Pennsylvania line. Owing to the jealousy of the old States in the matter of appointments, one deputy surveyor was selected from each of them—ten in number—to act under the personal supervision of the geographer in the field. A letter from C. H. Michener, Esq., of New Philadelphia, O., the author of the interesting history of the Tuscarawas valley, inserted below, goes very fully into the

biography of the deputy surveyors, and their exposures while running their lines.

A treaty had been negotiated in January, 1785, at Fort McIntosh, at the mouth of Big Beaver, by which the Wyandots and Delawares agreed to give up their claims east of the Cuyahoga and Tuscarawas rivers to the mouth of the Big Sandy (at Bolivar), and thence by a westerly line to Loramie's creek, in Shelby county, O.

Other tribes, and probably many Wyandots and Delawares, continued to resist the surveyors and settlers, as usual. Pittsburg was the headquarters for Hutchins, his deputies, and their employes, who required an escort of troops for each party in the field as a safeguard against Indians. Lieutenant Colonel Joseph Harmar's battalion had been raised for the protection of the Ohio pioneers, composed of a company from each State. A part of it reached the Ohio country late in 1785. In July, 1786, most of the surveying parties arrived at Pittsburg.

Hutchins commenced to run the base line, and his deputies took up the survey of the ranges, of which he was directed to include seven, making a breadth of country forty-two miles east and west.

The townships were by law to be numbered from the Ohio river northward to Lake Erie; the ranges to be numbered westward from the Pennsylvania line. The most westerly meridian of the "Seven Ranges" passes about a mile west of Magnolia, in Stark county, and strikes the Ohio river a few miles above Marietta.

As the State of Connecticut interposed her claims to the land north of the forty-first parallel of latitude, neither of the meridians were carried further north than what was supposed to be that parallel, which, in 1796, became the southern boundary of the Reserve. Hutchins' base line also passes through Magnolia, and its prolongation intersects the Tuscarawas at Bolivar, a few miles further west. In September, 1786, he had reached the Neinshilling or "Nemesheles" creek, near Sandyville, where Major Hamntrack, in

command at Fort McIntosh, sent a courier recalling the surveyors and their escorts, on account of demonstrations on the part of Indians.

He was then on ground familiar to him in 1764, when he ran and measured, day by day, the route of Colonel Bouquet's march. His record of the march was published by the Rev. William Smith, in an account of the expedition, at London, in 1766.

In Hildreth's Pioneer History of 1848, may be found the journals of Joseph Buell and John Matthews, who were with the surveying parties in 1786, in which the movements and dangers of the surveyors are given in a fragmentary way.

The letters of Captain Jonathan Heart of Harmar's battalion, preserved in manuscript by our Society, who commanded the escort of some of the parties, throw some light on their operations.*

North of the "geographers' line" the sections are numbered differently from those on the south. Section No. 1 is placed at the northeast corner of the township; numbering thence to the west, along the north line to section No. 6 at the northwest corner, thence back easterly from 7 to 12, and so on to No. 36 at the southeast corner. South of the base line, No. 1 is placed at the southeast corner, and the numbering is north along the east side to No. 6, at the northeast corner. They then returned to the south line, running north on the next tier of sections, and numbered them from 7 to 12 inclusive, and in the same way through the township, which brings No. 36 at the northwest corner.

The mode of numbering put in practice by Hutchins, north of his base line, is now used everywhere in the United States surveys.

It appears as though the surveyors of 1786-8 ran the township lines southward from the base as well as north, but the numbers of townships began at the Ohio river, counting

*NOTE.—A portion of Captain Heart's papers from the manuscripts of our Society have, since this paper was prepared and first printed, been edited by Mr. Consul W. Butterfield, of Madison, Wis., and published by Messrs. Robert Clarke & Co., of Cincinnati.

northward. The seventh range is nineteen towns in length, making 114 miles for the last meridian, which lies forty-two miles west of the Pennsylvania line. Marlborough, in Stark county, is the northwest corner town, or No. 19 of the seventh range. Going south this meridian passes between Canton and Onasburg, one mile west of Magnolia and of New Cumberland, through Uhrichsville and Middlebury on the National road, near Summerfield and Lawrence, to the Ohio river at the great bend above Marietta. Below the base line neither the town or section corners on the east side of this meridian correspond with that on the west. What with compasses that did not agree, the magnetic variation not carefully determined, a rough country over which to measure the lines, and the expectation of attacks by savages, it is not to be wondered at that these surveys were not very accurate. A full history of the incidents connected with the survey of the "Seven Ranges" would be of the highest interest. The work was done principally by brave men who had gone through the war of the Revolution. They were ready to fight for the possession of the rich lands of the West, with their old British enemy or his red allies of the forest.

LETTER OF MR. MICHENER.

NEW PHILADELPHIA, O., May 8, 1876.

Other engagements have prevented me from looking up data to answer your inquiry of the 1st inst. Rufus Putnam took no active *physical* part in the survey of the seven ranges. His work there was brain work. He was, I believe, the first to recommend the erection of a line of forts covering this territory.

Congress adopted the idea, and appointed the surveyors, of whom he was one, but he was then (May, 1785,) surveying the line of Maine, and Tupper was substituted in his place, until he could join the surveyors and geographers.

Harris and Adams, of the survey, resigned, but Putnam did not. He sent his nephew, John Matthews, out to assist, who tells us in his journal that after running a line to the "*Wine Shilling*" creek, near the Tuscarawas, they had word that the Indians were assembling to attack them. Hutchins and Tupper advised, and the surveyors retreated to the Ohio. In December (1786) Tupper left for Massachusetts, and in January (1787) Hutchins for New York, while Matthews remained on the Ohio during the winter and guarded the military stores at Fort Steuben a part of the time and the surveyors' stores a part.

Tupper's account to Putnam of the country he had been in, induced Putnam and others to come out, and Matthews says he met his uncle, who had been the nucleus of the first settlers with him, and they all proceeded to Fort Harmar, making it April, 1788. From this time until he was appointed Surveyor General, he did not resign the appointment of 1785, but it ceased, of course, on the completion of the survey of the seven ranges.

Taking all the facts as stated by Putnam himself in his correspondence, and the writings of Hildreth, the journals of Buell and Matthews, you must connect him with the survey of the seven ranges, from the inception to the conclusion, as one actively engaged therein, all the time. I write this from memory, but you find the ordinances of Congress of 1785, etc., in Hildreth's Northwest Territory article, in his "*Pioneer History*" of 1848, and so much as he gives of the journals of John Matthews, Joseph Buell and others, and I am satisfied they must corroborate what I have said in Ohio Annals in that regard. Very respectfully yours,

C. H. MICHENER.

Colonel Charles Whittlesey.

WESTERN RESERVE

—AND—

Northern Ohio Historical Society.

TRACT NO. 72.

THE BATTLE OF THE PENINSULA, SEPT. 29, 1812.

GENERAL WADSWORTH'S DIVISION, OHIO MILITIA.

BY COLONEL CHARLES WHITTLESEY.

[TRACT No. 51 of the Western Reserve and Northern Ohio Historical society, published in December, 1879, contains a paper by the late Colonel Charles Whittlesey upon the part taken by General Wadsworth's division of Ohio militia in the War of 1812. In the concluding paragraph of that paper the writer uses the following words: "It is remarkable that the only engagement known to have been fought on the Western Reserve was not fully described until after the lapse of half a century. We have found only one detailed account of it by a party who participated in the affair. It was written by the late Honorable Joshua R. Giddings of Ashtabula county, a volunteer from Captain Burnham's company. It was first published in the *Fire Lands Pioneer*, Volume I, No. 4, for May, 1759, the details of which must be reserved for a future paper." The following is Colonel Whittlesey's promised account. Aside from its historic value it will possess an added interest to our readers in the fact that the honored name of the venerable writer once more appears as a contributor after his labors in this life have ended forever.

An interesting paper upon this same battle, from the pen of Honorable A. G. Riddle, appeared upon page 398, Volume I, of the Magazine of Western History.]

Captain Cotton's detachment, seventy-two men, landed on the peninsula soon after sunrise. Eight of them were left with the boats under Corporal Coffin. Skirmishers under Sergeants Root and Hamilton, with twelve men each, spread themselves to the right and left of the trail, in the woods. Within ten minutes from the time their feet were on the shore

the forward movement commenced. The command rapidly crossed the peninsula to Ramsdale's place on the lake shore, a distance of about eight miles in direction somewhat to the west of north. No Indians were there, but the fires seen by scouts the day previous where the slaughtered cattle were cooked, and other evidences of a savage feast, were abundant.

Beyond Ramsdale's house was the wheat field which had been already harvested, but required some attention in order to make it more secure. This grain was too precious to be lost. The force was collected in the field, when Captain Cotton concluded to return to the boats, Hamilton and his flankers on the right, and Root on the left.

They had abandoned the expectation of a fight, but had not wholly given themselves up to false security. Their flankers were still in position, covering the rear. Root's little party remained awhile at the wheat field, following leisurely past Ramsdale's deserted house, about a mile in the direction of the boats, where he was near to the command of Captain Cotton. It was between eleven and twelve in the morning of a clear and pleasant autumn day. They were moving through open timber, the ground covered with a luxurious growth of native grass as high as the waists of the men. A party of Indians rose from the grass, fired a volley into the flankers under Root, gave a savage yell and dropped out of sight. Ramsdale's son was killed and one man wounded, leaving only nine, each of whom sprang behind a tree. In the words of J. R. Giddings, "Root directed his men to shelter themselves behind trees, and by his cool and deliberate movements stimulated them to maintain their ground. Whenever an Indian showed any part of his person he was sure to receive the salutation of our backwoodsman's rifle. The firing was kept up in an irregular manner, constantly interspersed with the yells of the Indians, until the little guard were reinforced from the main body. As the sound of the enemy's rifles first struck the ears of Captain Cotton and his party, they stopped short and stood silent for a moment, when they began to lead off from the rear without orders and without regularity. Many of them raised the Indian yell as they started. As they reached the scene of action each advanced with circumspection as the whistling of balls informed him that he had obtained the post of danger. The firing con-

tinued for some fifteen minutes after the first arrival of assistance from the main body, when it appeared to subside by common consent of both parties. As the firing became less animated, the yells of the savages grew faint, and the Indians were seen to drag off their dead and wounded. About the time of these manifestations of a disposition on the part of the enemy to retire from the conflict, Captain Cotton ordered a retreat. It was a matter of much doubt among the officers and men whether the Indians who attacked Root's flank guard were the same who appeared in the bay early in the morning, and who sunk the boats left by Corporal Coffin and his guards. It has always been the opinion of the writer that it was a different party and far less in numbers. Captain Cotton retired and was followed by a large portion of his men. A few remained with Sergeants Root and Rice and maintained their position until the enemy apparently left the field. Mr. Rice was orderly sergeant in the company to which the writer belonged. He was a man of great physical power, and while in the field exhibited such deliberate courage that he soon after received an appointment from the brigadier-general as a reward for his gallant conduct. He was also permitted to command the next expedition which visited the mouth of the bay a week subsequently. When the firing had entirely ceased, our intrepid sergeants had a consultation, and thought it prudent to retire to where the main body had taken up a position some sixty or eighty rods in the rear of the battle ground. Sergeant Hamilton and his guard were so far distant at the time of the attack, that they arrived in time to share only in a part of the dangers of this skirmish. As soon as they reached the party under Captain Cotton, that officer proposed to take up a line of march directly for the orchard at which they landed in the morning. To this proposal Sergeant Rice would not consent until the dead and wounded were brought off. He was then ordered to take one-half the men and bring them away. This order was promptly obeyed. The dead and wounded were brought from the scene of action to the place where Cotton was waiting with his men. The dead were interred in as decent a manner as could be done under the circumstances, and the line of march was again resumed. There were but two dead bodies left on the ground at the time of the retreat—Ramsdell, who fell at the first fire, and Blackman, who belonged in the southern part of

Trumbull county. James S. Bills was shot through the lungs, and after being carried back to where Cotton had made a stand, and after leaving his last request with a friend, he died before the bodies of Blackman and Ramsdell were interred, and the three bodies were buried together between two logs covered with leaves, dirt and rotten wood. There was but one man so wounded as to be unable to walk. A ball had struck him in the groin, and he was carried on the back of Sergeant Rice most of the distance. Rice was a man of great determination of purpose, and refused to leave his charge during the subsequent skirmish.

There was a very general expectation that the enemy would make an attempt to retrieve their evident discomfiture. They had lost some of their men, but had not taken a single scalp, which, with them, is regarded as disreputable, particularly when they are the aggressors, as in this instance.

The order of march was the same as it had been previously. All proceeded regularly and silently towards the place of landing. When the main body moving along the road had arrived in sight of the improvement at the middle orchard, there suddenly appeared two Indians, some thirty or forty rods in front of the foremost numbers of our party. The Indians appeared to have suddenly discovered our men and started to run from them. Our men in front made pursuit, while others, more cautious than their comrades, called loudly for them to stop, assuring them there was danger near. Our friends stopped suddenly, and at that instant the whole body of Indians fired upon our line, being at farthest not more than twenty rods distant, entirely concealed behind a ledge of trees that had been prostrated by the wind. It was a most unaccountable circumstance that not a man of our party was injured at this fire. The Indians were on the right of the road, and, of course, between the road and bay. Our party betook themselves each to his tree and returned the fire as they could catch sight of the enemy. The firing was irregular for some three or five minutes, when Sergeant Hamilton, with the right flank guard, reached the scene of action. He had unconsciously fallen somewhat behind the main body during the march. As he advanced he came directly upon the Indians' left wing. His first fire put them to flight, leaving two or three of their number on the ground. As they retreated they crossed the road in front of the main body, who by this

time had been joined by Sergeant Root and the left guard. Having crossed the road, the Indians turned about and resumed the fire.

At this time Captain Cotton began to retire towards a log building standing within the cleared land. The retreat was very irregular, some of the men remaining on the ground and keeping up an animated fire upon the enemy until Cotton and those who started with him reached the house in which they took shelter. Those in the rear at last commenced a hasty retreat also, and were pursued by the Indians until they came within range of the rifles of those who had found shelter in the house. The Indians commenced a fire upon those in the house and kept it up for a short time, keeping themselves concealed behind the brush and small timber. Captain Cotton, with about twenty men, entered this building and very handsomely covered the retreat of those who remained longest on the field. There were about thirty of those who passed by the house and proceeded to the place where we had landed in the morning, expecting to find the boats in which they might escape across the bay. There were six wounded men brought away that evening, making with the guard left in the boat thirty-seven. These were joined by those who had remained on Cedar Point from the time they left Bull's island on their way from Lower Sandusky, so that the whole party who reached Huron that night were between forty and fifty. The guard and two of the boats were gone. The other two boats were scuttled. They dare not venture to the house, naturally supposing that it was surrounded by the enemy. Some of them pulled off their clothes and attempted to stop the holes in one of the boats, so as to enable them to cross the bay in it. Others fled at once down the shore of the bay in order to get as far from the enemy as they could, entertaining a hope that some means would offer by which they might cross over to Cedar Point. Others followed, and before sunset all those who had not sought shelter in the house were on the eastern point of the peninsula with their six wounded comrades. The firing was distinctly heard on Cedar Point by Corporal Coffin and his guard of seven men, who, under a state of extreme anxiety for the fate of their companions, put off from the point and lay as near the peninsula as they thought safe from the rifles of the enemy, should there be any there. They rejoiced to see their friends com-

ing down the point, bringing their wounded, wet with perspiration, many of them stained with blood, and all appearing ready to sink under the fatigues and excitement of nearly twenty-four hours' unmitigated effort.

The boats were small, and one of them was loaded at once and crossed to Cedar Point and returned, with the assistance of the other took in all that remained on the point of the peninsula, and crossed over. All were now collected on the beach at Cedar Point. Sergeant Wright was the highest officer in command. Eight men were detailed as oarsmen and ordered to take in the six wounded men and move directly for the mouth of Huron river. I do not recollect the number of men placed in the other boat, but believe it was eight. The remainder took up the march for Huron by land. It was my lot to act as one of the oarsmen on board the boat on which the wounded were placed. Daylight was fast fading away when we put out from Cedar Point into the mouth of the bay. Here we stopped some little time and listened in the silence of the evening for any noise that might come from the house in which our companions were left. Hearing nothing from that distance, we started for the mouth of Huron river. We entered the river and arrived at a place then called "Sprague's Landing," about a mile above the mouth, about one or two o'clock on the morning of the thirtieth of September. An advance post was kept at that point, and we fortunately found one of the assistant surgeons belonging to the service at that place. We soon started a fire in a vacant cabin and placed the wounded in it, and delivered them over to the care of the medical officer to whom I have alluded, but whose name I am now unable to recollect. Having accomplished this, our Sergeant Rice proposed going to headquarters that night, provided a small party would volunteer to accompany him. Anxious that the earliest possible information of the situation of Captain Cotton and his party on the peninsula should be communicated, some eight or ten of us volunteered to accompany our determined and persevering sergeant. In the darkness of the night we mistook the road, and finding ourselves on a branch leading south, and which left Camp Avery on the right perhaps a mile and a half, we attempted to wend our way through the forest. We soon lost our course, but wandered through openings and woods until daylight enabled us to direct our course

with some degree of correctness. We struck the road near what was then called "Abbott's Landing," and reached camp a little after sunrise. Arrived at headquarters both officers and men were soon made acquainted with the situation of our friends who yet remained on the peninsula. But in the enfeebled state of our skeleton army it was difficult to obtain a sufficient force to send out to relieve them. During the forenoon Lieutenant Allen (of the company to which I belonged) succeeded in raising some thirty volunteers, and started to the peninsula in order to bring home those we had left there. The necessity of this movement will be understood when the reader is informed that Captain Cotton and his men were destitute of all means of crossing the bay. Lieutenant Allen, however, met with difficulty in obtaining boats to convey his men across the bay, and did not reach Captain Cotton and his party until the morning of the first of October. They then found our friends in the house, but the enemy were not to be seen.

Soon after Captain Cotton and his men commenced firing upon them from the house, they retired out of danger. They seemed not to have noticed those who passed by the house in order to find the boats, and who then passed down the bay to the point of the peninsula, on Monday, during the skirmish. Had they discovered those men, they would doubtless have pursued and massacred them all. Being unconscious of this, and there being no prospect of effecting any injury to those in the house, they retired to the scene of action and stripped and scalped two of our dead whom we left on the field. They mutilated the body of Simons, who fell during the skirmish. His right hand was cut off, and the scalping knife of a chief named Omick was left plunged to the hilt in his breast. This Indian had previously resided at a small village on the east bank of the Pymatuning creek, in the township of Wayne, in the county of Ashtabula. I had been well acquainted with him for several years, and so had many others who were engaged in the combat of that day, some of whom declared that they recognized him during the skirmish. It is also supposed that he must have recognized some of his old acquaintances, and left his knife in the body of Simons as a token of triumph. The knife was recognized by some of the soldiers from its peculiar handle of carved ivory. The Indians took away and secreted the bodies of their own dead.

There were three of our men killed during this latter skirmish. Mason lived on Huron river, and cultivated the farm on which we were encamped. He came into camp on the twenty-eighth, about sunset, volunteered for the expedition and accompanied us on our march. He was shot through the lower region of the breast, the ball evidently having passed through some portion of the lungs, as the blood flowed from his mouth and nose. A friend took him upon his shoulder and attempted to bring him off the field, but as the enemy pressed hard upon them, Mason requested his friend to set him beside a tree, and give him a gun and leave him to his fate. His friend, knowing that at best he could only prolong his life a few moments, sat him down as requested and left him. He was seen some moments subsequently by those who passed him in haste, flying before the pursuing enemy. They reported him as still sitting up beside the tree, and the blood flowing from his mouth and nose. They also stated that they heard the report of his musket soon after they passed him, and the report of several rifles instantly followed. On examining the body, it was found that several balls had passed through his breast, and it was generally supposed that he fired upon the enemy as they approached him, and that in return several Indians fired at him. His body was stripped of its clothing and he was scalped.

On the arrival of Lieutenant Allen and his party at the house, Captain Cotton joined him, and they proceeded to bury the bodies of those two men. Mingus (I may have forgotten the name of this man, but I think such was the name) was also killed during this skirmish. His brother saw him fall, immediately seized the body and, raising it upon his shoulder, proceeded to the house with it. After the Indians had retired out of sight and left our friends somewhat at leisure, they proceeded to raise a portion of the floor, composed of planks split from large timber. They then dug a sort of grave and, burying the body, replaced the floor, leaving no signs of the body being deposited there. Captain Cotton and Lieutenant Allen and his party then recrossed the bay, and returned to camp on the evening of the first of October. The next morning we again mustered, and the roll of volunteers was called. The names of the killed and wounded being noted, we were dismissed, and each returned to his own company.

